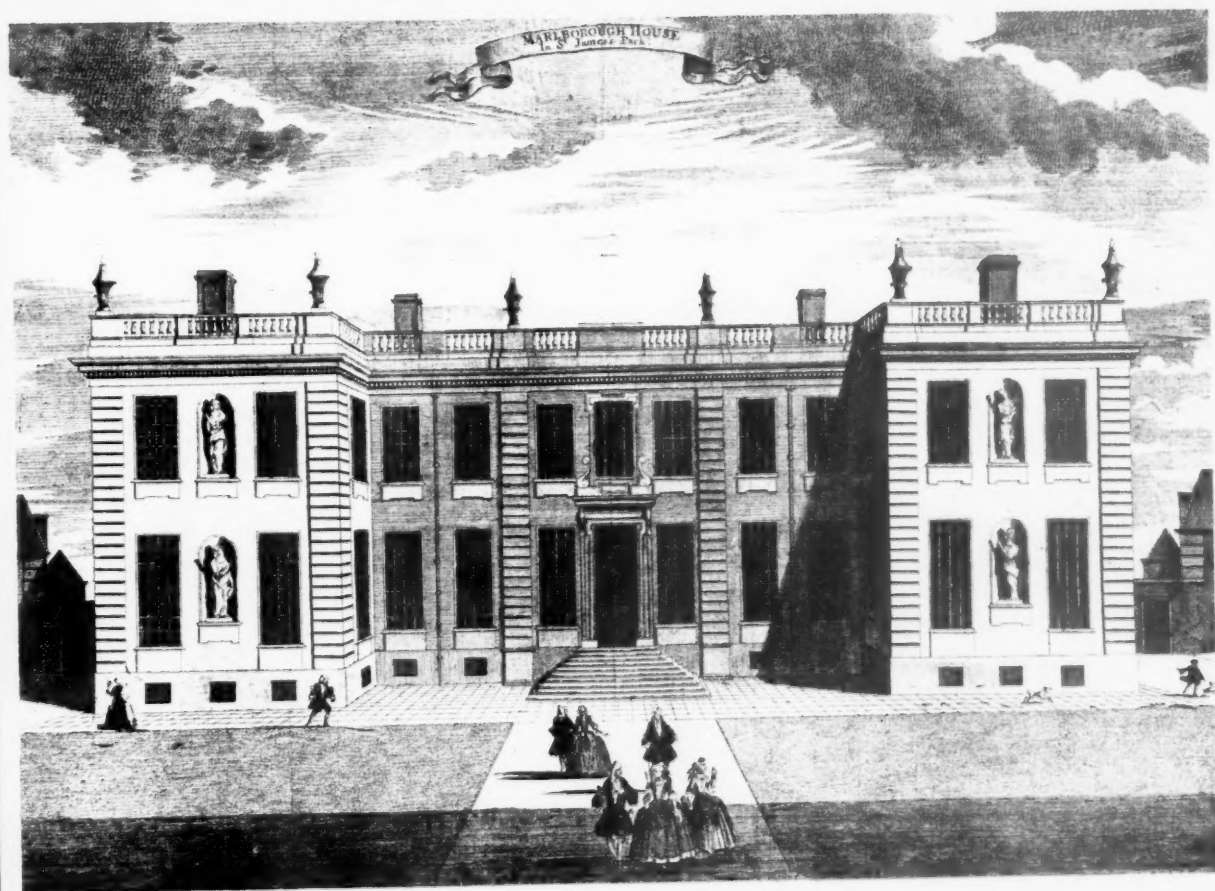


THIRD SERIES VOL 57 NUMBER 1

SEPTEMBER 1950

THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

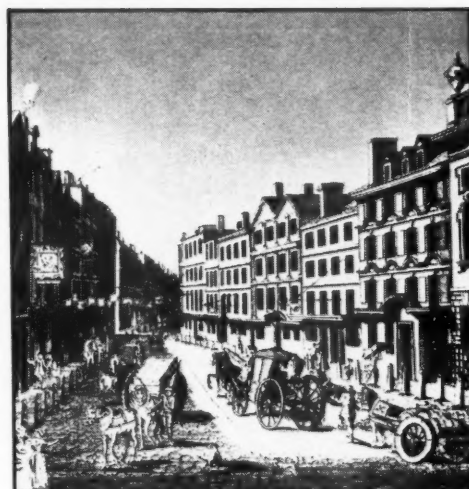
66 PORTLAND PLACE LONDON W1 • TWO SHILLINGS AND SIXPENCE



Marlborough House [1709] by Wren. From a 1754 engraving by Sutton Nicholls. The Parker Gallery.

The closed shop

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THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

THIRD SERIES VOL 57 NUMBER 11 : SEPTEMBER 1950 : 66 PORTLAND PLACE LONDON W1 : TWO SHILLINGS & SIXPENCE

409 EDITORIAL	420 INFANTS' SCHOOL AT LITTLEOVER, DERBYSHIRE—ARCHITECT F. H. CROSSLEY	423 THE ROME SCHOLARSHIP IN ARCHITECTURE, 1950
411 WENTWORTH CASTLE TRAINING COLLEGE FOR WOMEN TEACHERS		426 BOOK REVIEWS
416 NOTES ON THE REPAIR AND PRESERVATION OF DECORATED PLASTER CEILINGS —J. F. S. JACK	422 PRACTICE NOTES	426 NOTES AND NOTICES
		428 MEMBERS' COLUMN

The 1950-51 Sessional Programme

The programme of R.I.B.A. General Meetings, Sessional Papers and of lectures arranged by the Architectural Science Board forms a loose inset to this *Journal*. The President, Mr. A. Graham Henderson, will deliver his Inaugural Address on 14 November, when the portrait of Mr. Michael Waterhouse, Past President, will be unveiled and the London Bronze Architecture medal presented to Mr. C. H. James, R.A. [F]. An important discussion meeting on the reports of the Productivity Team and the Working Party will be held on 28 November. On 12 December, Mr. John Summerson, Curator of the Soane Museum, will lecture on *Soane: The Case-History of a Personal Style*. In the new year, Mr. H. S. Goodhart-Rendel on *Draughtsmanship of the Past*, Mr. Wallace K. Harrison on *The United Nations Building in New York*, and Mr. R. Furneaux Jordan, Principal of the A.A. School, on *The Architectural Significance of 1851*, together make up a remarkably interesting series of sessional papers and one likely to draw large attendances of members.

The programme of technical lectures of the Architectural Science Board is not less promising. Mr. C. H. Aslin, County Architect of Hertfordshire, will lecture on *Specialized Developments in School Construction* on 24 October. A synopsis of Mr. Aslin's paper will be found elsewhere in this *JOURNAL*. The other lectures in this session cover sanitary services, furniture design and construction, floor finishes, daylighting and the technical problems of a new town.

Production of this Journal

Members are receiving this *JOURNAL* late and in shortened form owing to the stoppage of printing in London arising from an industrial dispute. Forthcoming Journals are likely to be adversely affected during the next month or two. We regret that owing to this uncertainty, notice of some forthcoming events may be published after they have taken place and that the *Journal* will be unable to give its usual service to members.

Royal Fine Art Commission

The King has approved the appointment of Mr. Frederick Gibberd, A.M.T.P.I. [F], as a member of the Royal Fine Art Commission in succession to Sir J. Hubert Worthington, O.B.E., A.R.A., M.A. [F], whose term of office has expired, and the reappointment of Professor Geoffrey Fairbank Webb [Hon. A].

Report of the Productivity Team

Copies of the Report of the Anglo-American Productivity Team are still available. They can be obtained without charge on application to the Secretary, R.I.B.A.

Leeds Building Week

The evident great success of the Leeds Building Week has put beyond doubt the value to the building industry of these regional displays organized by the Ministry of Works. Tunbridge Wells was experimental and Warwick small in scale, but they provided useful experience for the larger affair at Leeds which, we hope, will be the forerunner of several similar shows in the principal provincial centres.

The 'Week' was really an exhibition with meetings and lectures. A site of several acres was none too large for the many exhibits which were partly in marquees and partly in the open air. In the marquees were stands occupied by various government departments and professional organizations, local schools of architecture and trade training schools and by a number of commercial firms. The open-air exhibits were mostly of mechanical apparatus.

The amount of space occupied by machines illustrated the recent rapid growth in their use; today a typical large building site is noisy with the exhaust rattle of drills, hoists, mixers, mobile cranes, bulldozers, mechanical barrows, rammers and various other kinds of powered appliance, examples of which were on view at Leeds. Though of first importance to the builder, these machines are not without interest to the architect, because more and more he must design with their use in view if production is to be increased.

The opening ceremony was performed by the Minister of Works, who appealed for increased production by use of better planning and training, mechanical aids and incentive schemes. He wanted to see a 20 per cent greater output from the present labour force. All sections of the industry would have to give of their best to achieve this aim, including architects. Regarding architectural training he said he would like to see much more time spent by students on building sites. The programme ahead was immense; there was not the slightest chance of men working themselves out of a job in the building industry in the foreseeable future.

The exhibition at Hunslet Moor was continuously crowded with visitors representing all sections of the industry. Because much of it was in the open air, the visitors were able to see some building processes being carried out and mechanical plant in operation. This advantage over the indoor exhibition, which is necessarily static, might well be extended in future building weeks. By actually operating appliances the whole show is given an air of activity not unlike that of a building site.

R.I.B.A. Reception for Overseas Visitors

The Council held on 10 October an Informal Reception for architects and students of architecture from the British Dominions, Colonies and the United States who were visiting England during the autumn of this year.

Exhibition of Drawings by Mr. Curtis Green, R.A. [F]

A small exhibition of water-colour and line drawings by W. Curtis Green, R.A. [F], will be on view in the Members' Room at 66 Portland Place from 2 to 28 October (Weekdays 10 a.m. to 7 p.m., Saturdays 10 a.m. to 5 p.m.). The Institute feel that many members will like to take the opportunity of seeing Mr. Curtis Green's drawings.

Salaries of Professional Civil Servants

In accordance with the recommendations of the Chorley Committee on higher civil service remuneration, a committee under the chairmanship of Sir Thomas Gardiner has been appointed to inquire into the conditions of service of the 'Works Group' of professional civil servants. Sir Lancelot Keay is a member of the committee.

The Committee's terms of reference are:—

'In accordance with the recommendations of the Committee on Higher Civil Service Remuneration (Report Cmd. 7635) to consider and advise on the future organization, structure and remuneration on a common basis of the Works Group of professional classes (i.e., architects, maintenance surveyors, quantity surveyors, estate surveyors, land commissioners, lands officers, civil engineers, structural engineers, sanitary engineers), and the general Service class of mechanical and electrical engineers.'

The R.I.B.A. have been invited to submit evidence on the problem as it affects architects. A sub-committee of the Salaried and Official Architects Committee is at present preparing the evidence.

Belgian Decoration for British Architect

Mr. Herbert J. Rowse [F] has been created Officer de L'Ordre de Leopold II in recognition of his services as the British member of an international jury appointed to judge an architectural competition for a national library, now being built, as a memorial to the late King Albert I of Belgium. The decoration was recently presented to Mr. Rowse by the Belgian Consul, Mr. Harding Hunt.

School of Architecture, Cape Town

The School of Architecture of Cape Town University has issued an appeal for funds to build a new building for the School. Professor L. W. Thornton White [F] and his staff and students have produced an interesting appeal brochure, written in English and Afrikaans, and illustrated with charming little drawings some of which we propose to reproduce as tail pieces in the R.I.B.A. JOURNAL.

The School, which now has 369 students, has been in temporary buildings since the first Chair of Architecture was established in 1937. That the appeal has met with a warm response in South Africa is shown by the fact that within the first month about £150,000 was subscribed. It is hoped to obtain a million pounds before this time next year.

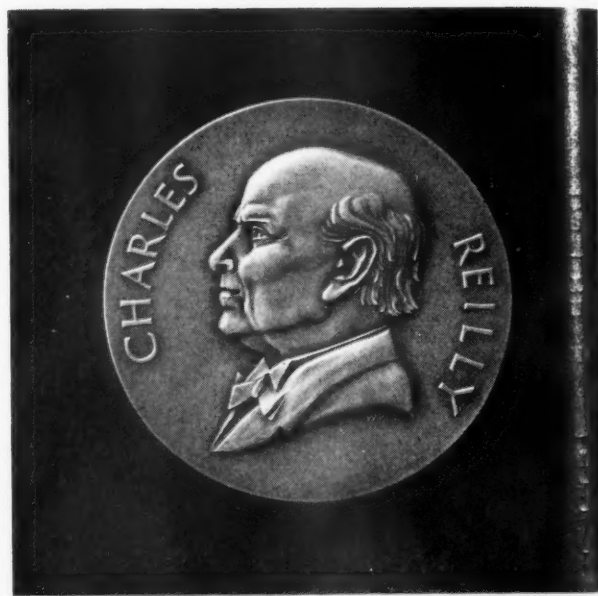
C.P.R.E. National Conference

The 12th National Conference of the Council for the Preservation of Rural England is to be held at Tunbridge Wells from 19 to 22 October on the subject 'Important Developments in Rural England'. The Conference is not confined to members of the C.P.R.E. Those wishing to attend should apply to Mr. H. G. Griffin, C.B.E., Secretary of the C.P.R.E., 4 Hobart Place, S.W.1.

The Cover Picture

Marlborough House was designed by Wren in 1709 for John Churchill, Duke of Marlborough. It reverted to the Crown in 1817 and became the town house of Prince Leopold of the Belgians, of Queen Adelaide and, in 1861, of the Prince of Wales. It is now the London residence of Her Majesty Queen Mary.

The illustration is from a print which formed part of a recent bi-centennial exhibition of the Parker Gallery, Albemarle Street, London. Henry Parker, the great, great grandfather of the present head of the firm founded the business in 1750 at 82 Cornhill.



The Reilly Medal and Prize

As a result of subscriptions received from old students and friends of the late Sir Charles Reilly, 'The Reilly Medal and Prize' has now been established at the Liverpool School of Architecture, the University of Liverpool, made famous by Sir Charles Reilly, who was Roscoe Professor of Architecture there for 26 years.

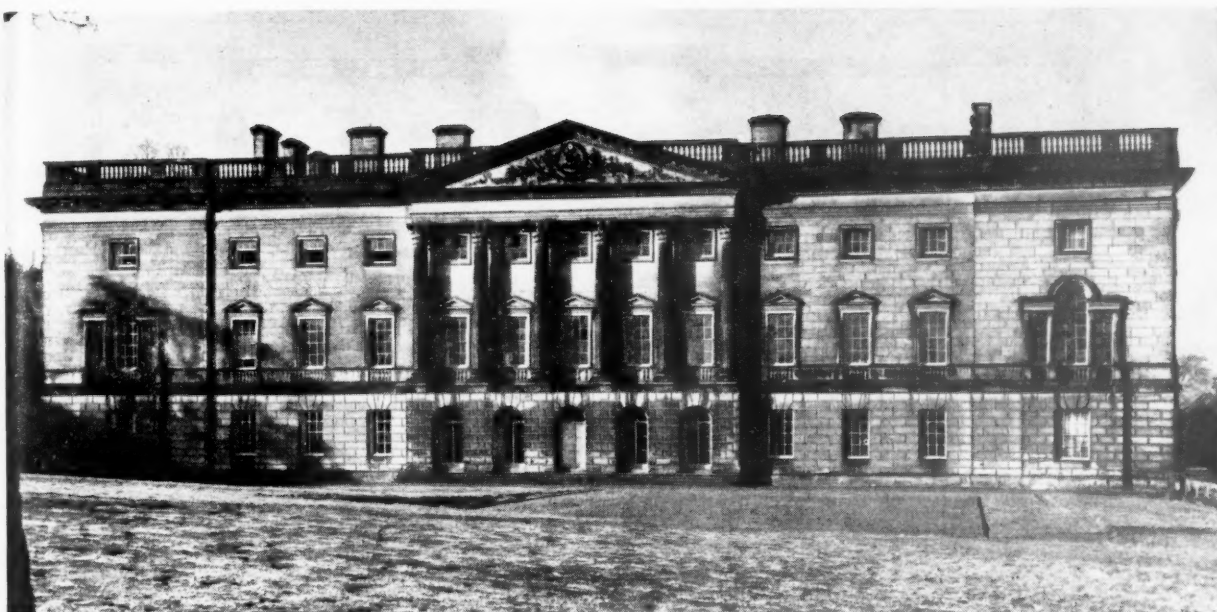
The Medal and Prize of £35 will be awarded annually to the Fifth (Final) Year student whose Thesis design is considered the best.

The Medal in bronze, is by Mr. H. Wilson Parker.

R.I.B.A. Diary

Tuesday, 24 October 6 p.m. A.S.B. Lecture. *Specialized Developments in School Construction*, by C. H. Aslin [F].

Tuesday, 14 November 6 p.m. President's Inaugural Address, Presentation of London Architecture Bronze Medal and Unveiling of Portrait of Michael Waterhouse, Past President.



The south front, dated 1768. Designed by Carr of York

Wentworth Castle Training College for Women Teachers

Barnsley Education Committee

Sydney E. Castle [F] Architect to the Committee

READERS OF THE REPORT of the Committee on Houses of Outstanding Historical or Architectural Interest will recall that conversion into teaching centres was mentioned as being one way in which historic houses could be used and so saved from dereliction, and it is interesting to note the following comment in a booklet prepared by the Barnsley Education Committee for the official opening of Wentworth Castle as a training college, in October 1948. 'At a time when the continued existence of so many historic mansions has become increasingly problematical, the conversion of Wentworth Castle into a training college for women teachers is perhaps the most useful and desirable future which it is possible to conceive for its extended life.'

The present mansion dates from the reign of Charles II, when it was in the possession of the Cutler family and was known as Stainborough, but in 1708 the estate was sold to Thomas Wentworth, Lord Raby, head of the Yorkshire family of Wentworth. The ancestral home of Wentworth Woodhouse had not passed to Lord Raby but to Thomas Watson, and from that time the ruling passion of Lord Raby was to make his position equal to that of Watson, and to found a home of the same importance and dignity as that of Wentworth

Woodhouse. In 1711 Lord Raby was created Earl of Strafford. About 1728 the name of the estate was changed from Stainborough to Wentworth Castle.

The block built during the reign of Charles II, and known as the Cutler building, was some 80 ft. long and 50 ft. wide, and contained the Cutler entrance hall and staircase, which are shown in the accompanying illustrations. This block served as the nucleus for later additions; these were the east wing, built by Strafford between 1714 and 1749; the south wing, built by his son William and designed by Carr of York, being completed in 1768; and further additions that were carried out in 1894.

During the last war the mansion was occupied by troops and prisoners of war. In 1947 the Barnsley Education Committee entered into negotiations with the then owner of Wentworth Castle, Captain B. C. V. Wentworth, and in September 1948 the mansion, certain outbuildings, and some 60 acres of garden and parkland became the property of the Barnsley Corporation, who proposed to convert the premises into a training college for women teachers.

The architect to the Education Committee, Mr. Sydney E. Castle, [F], was

faced with the difficult problem of converting the building into a college with assembly hall, lecture rooms, library, arts and crafts room, sleeping quarters, and so on. Further, dry rot and the death watch beetle had caused considerable damage; the rooms were in a bad state of decorative repair, following the occupation by the military, and the water, heating, and electrical installations needed enlargement and considerable repair.

Fortunately the size and disposition of the rooms made them reasonably adaptable to the new user, but Mr. Castle had one or two awkward problems to solve. One concerned three lofty rooms on the first floor of the south front, containing eight fitted and glazed windows at high level, under the main cornice; these rooms are indicated on the accompanying plans. Over these apartments were attic rooms with headroom too low for them to be suitable for sleeping purposes. It was wished, of course, to provide as much accommodation for students as possible, and therefore the suggestion was made that the three floors over the lofty rooms might be lowered by 6 ft. and so give greater headroom to the attic rooms over, which would then be lighted by the eight windows that were before mainly ornamental. It seemed inevitable that this operation would involve the destruction of the three ceilings supported by the floors, but as they were richly moulded and painted and contemporary with mid-18th-century design, the prospect disturbed Mr. Castle.

There was a thick cement coating over the floors proposed to be lowered, and as the men began to hack at it with picks preparatory to removal and destruction Mr. Castle noticed that the blows of the picks caused hardly a tremor in the oak-beamed construction of the floors, and the idea



came to him that it might be possible to lower them intact with their attached ceilings. The floors were constructed with main beams spanning the shortest dimension and housed into the walls. Secondary beams spanned from the main beams to the other walls.

Mr. Castle had scaffolding erected and jacks placed under the points of intersection of the main and secondary beams, and also close to the wall-ends of all the beams. Vertical chases 6 ft. long were then hacked in the walls under the bearings of the main beams; metal shoes were inserted at the height necessary to receive the ends of the secondary beams when lowered, and these beams were then cut near their seatings in the walls. The ceilings were also cut around

their edges. The jacks were then operated and the floors and ceilings were gradually lowered; all supported points being brought to the same level before the jacks were re-adjusted. This operation was carried out successfully; not a crack appeared in the ceilings and the decoration remained undamaged. Thus sleeping accommodation was provided for some 15 students; at the same time new lavatories were planned, with access from the three bedrooms.

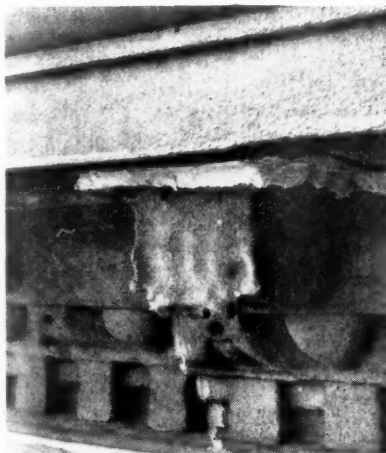
The kitchen premises presented another problem. The Great Hall, in the centre of the east front, was the only room suitable for the college dining-room, but the adjoining rooms were dark and unventilated. Mr. Castle therefore had an area excavated some 5 ft. wide and extending the length of

the two rooms he proposed to use as kitchens. New windows were inserted, making the new kitchens light and airy, and this was an important point in the conversion of the castle to college use, as the pertinent section of the Ministry might have refused consent to the project, on the score that the cooking facilities were inadequate and undesirable, but full approval was given to the improved kitchen department.

Alterations to buildings that have been added to at various times are apt to disclose curious features; in the room at the north-east corner of the lower ground floor, which was formerly used as the dining-room but is now the crafts room, Mr. Castle had occasion to take down some panelling on the north wall and he noticed that the



Second floor plan, showing the three rooms where the floors were lowered



Portion of the main cornice, showing decay

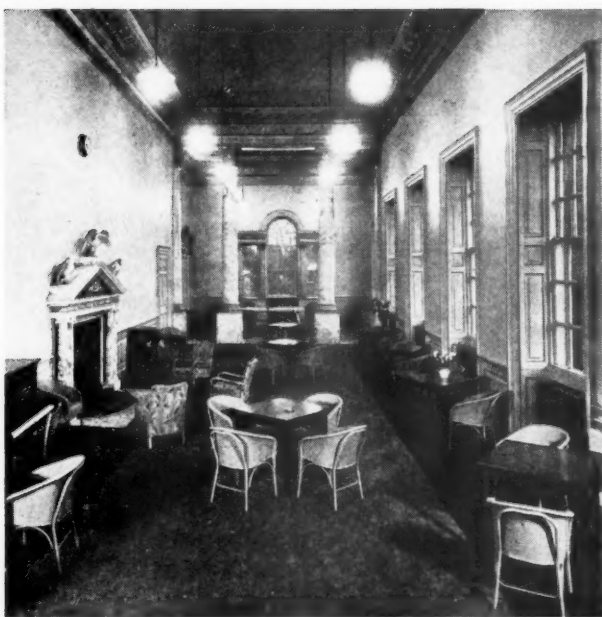
exposed wall was partly masonry and partly brick; out of curiosity he had some of the bricks removed and found an oak sash window, glazed with crown glass, and placed centrally with the room and its pilasters. The reason for blocking-up this window is not known; it certainly in the old days exposed the diners to the inquisitive stare of persons standing in the entrance drive, but whatever the reason the restoration of the window to its proper use much improved the room.

Although some of the walls measured 3 ft. in thickness and appeared to be good solid work it was discovered that they were far from being so, as they were little more than cavity walls filled with loose rubble, which would be somewhat disconcerting if it were proposed to put heavy loads on them.

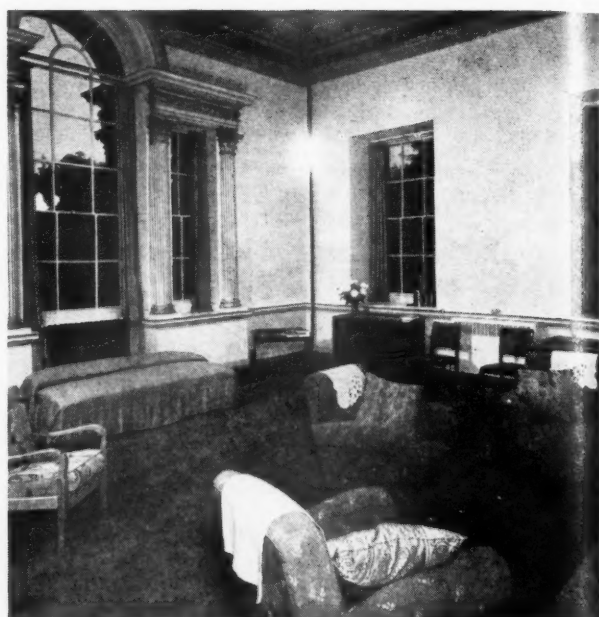
Damage due to the death watch beetle was found in many places. In one case it was noticed that an oak beam 24 in. square, supporting cross-joists, had sagged 7 in.

and on examination it was found that the whole of the middle of the beam had been eaten away, leaving only a 2 in. casing. The moulded ceiling below was uncracked, in spite of the deflection. Another species of beetle had attacked the laths of a moulded and painted ceiling over the staircase of the east wing.

Although decay of the stonework was fairly general it was by no means uniform or consistent; in the main cornice the modillions and dentil courses were found to be defective in certain stretches, although fairly intact in adjoining lengths; this of course gave rise to anxiety as to the stability and safety of the balustrading on top of the cornice and involved a critical examination of the whole length of the cornice. An accompanying illustration shows a typical example of decay in the modillions and dentils, and although it looks as if the exposed surfaces are soft and crumbly this was found not to be so.



The students' common room



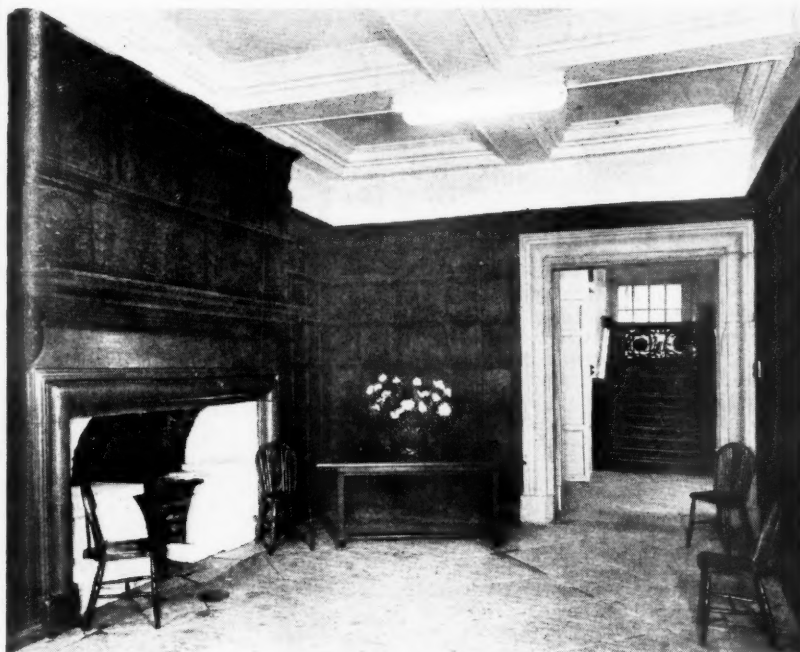
The principal's sitting room



The college dining room, formerly the great hall



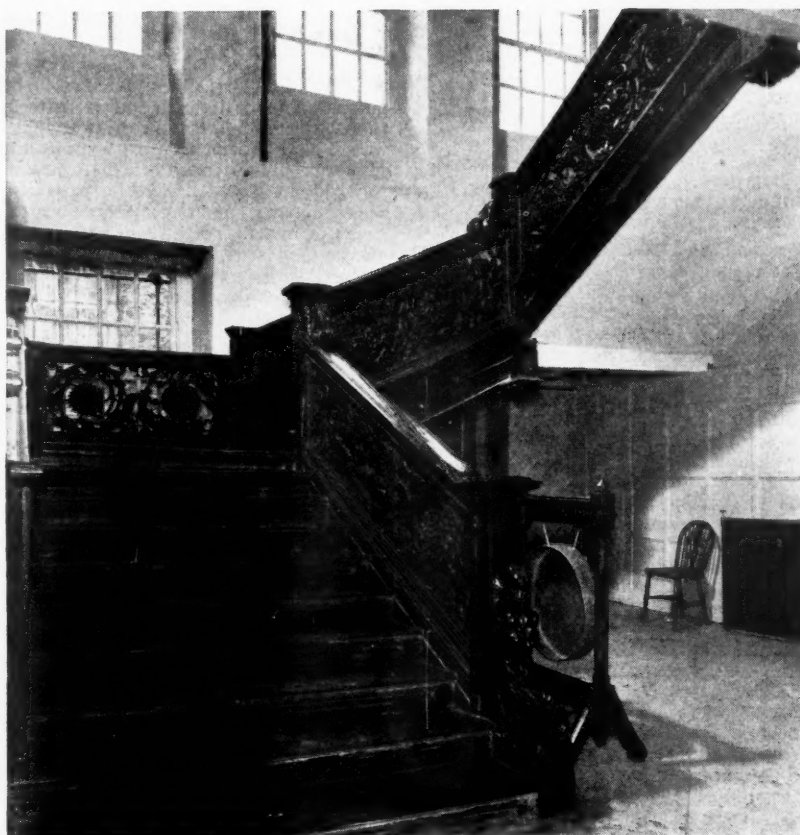
The crafts room. In the left-hand wall (not shown) the buried window was found



The Cutler entrance hall



Lowering the floor. Note exposed wall face of far wall



The Cutler staircase



Jack in position under two 15 in. by 6 in. main beams

It is not surprising to learn that when first the property was inspected as a possible college for the Ministry of Education emergency training programme it was rejected on account of its dilapidated condition, but when later it was proposed to convert it into a permanent college Mr. Castle felt able to advise that the building could be salvaged, even if it involved many difficult problems and a considerable amount of new work, including new lavatory accommodation, new staircase, and so on.

The additions and alterations were carried out by the direct labour department of the Barnsley Corporation, under the superintendence of Mr. G. Townshend, acting for the Director of Education.

Notes on the Repair and Preservation of Decorated Plaster Ceilings

By J. F. S. Jack, M.B.E., Historic Buildings Branch,
Ministry of Works

THE METHODS of repair and reinforcement described below are suitable for ceilings with raised or modelled enrichments of plaster, paintings on their surfaces, or both.

Most old plaster ceilings show a certain irregularity of surface and may sometimes appear to be sagging away from their supports. These irregularities are not necessarily signs of danger. In the old ceilings most of the plasterwork, both plain and enriched, was modelled *in situ* and the craftsmen were not required to attain the same accuracy as today.

Commencing with oft-repeated ornaments like fleurs-de-lis, roses, masks, coats of arms, etc., it became the practice to make the various parts in moulds and then to bed them on to the plain ceiling with wet lime, and perhaps a few nails to secure them. It is now usual to make all parts in moulds, as fibrous plaster, and to nail or screw the various sections of the ceiling to the supporting timbers.

Examination from Below

After examination of a ceiling from floor level a further investigation, if required, can be carried out conveniently from some tall trestles with planks. If the ceiling is too high, a comparatively small scaffold with wheels, that can be moved from point to point, will be found most convenient. An examination should be made from the scaffold, section by section, and all defects or apparent defects should be noted on a diagram of the ceiling. Any unusual sagging, cracks, loose pieces of ornament, etc. should be noted. By pressing slightly on the plaster at frequent intervals any springiness or loose sagging of the plaster may be detected, and the area affected should be shown on the diagram.

When this survey is complete it should be possible to decide whether the defects are local or general over the whole or a large part of the ceiling. It will also be seen whether the defects are superficial or are due to some weakness in the lathing or timbers above the plaster.

The following defects should be looked for and suitable measures taken to cure them:

- Discoloration of the plaster or severe flaking of its limewashed or painted surface is usually a sign of dampness from leaky pipes or defects in the roof.

- Long continuous cracks across a ceiling often occur immediately under the main supporting beams. Sometimes the ceiling laths are nailed directly to the underside of the main beams and the plaster, when applied, can only grip the inequalities

of the laths, but can not squeeze up between them, and curl over so as to form proper keys, thus the plaster immediately under the beams has a comparatively weak hold and under strain is more likely to crack than in other parts of the ceiling where there are proper keys. Any warping, twisting, sagging or other movement of the main beams is therefore likely to cause long cracks in the plaster. Furthermore, the ceiling joists are themselves tenoned into the main beams, and although originally they were probably more or less tightly fitted, in course of time they will have shrunk and sagged and will have pulled out of their mortises to a certain extent. The root cause of such cracks should be determined. It may even be found that the ends of the main beams, where they rest in the walls, are decayed and have sunk, and in so doing have forced the plasterwork down until it has cracked.

Fine wandering cracks in a ceiling are not necessarily dangerous, but when such cracks have widened, or when one edge of a crack is lower than the other it is time to investigate the cause and remedy defects.

The next step should be to provide some temporary support for the plasterwork and then to examine the ceiling from above.

Precautionary Measures for Supporting Loose Plaster

Positions of ceiling joists should be ascertained by making a few borings through the plaster with a bradawl. Support can then be given to sagged, badly cracked or loose parts by means of pieces of plywood, of suitable size and shape, and having a soft pad of felt on the upper surface, screwed up to the nearest convenient joist (Fig. 1).

When a ceiling has deeply moulded ribs or modelled decorations such as foliage it may be possible to secure a few stout battens at intervals with blocking above the battens to keep them clear of the mouldings and other raised enrichments. The battens should be fixed with long coachscrews to the ceiling joists or beams above. Having secured the battens the next step would be to lay in a sufficient number of light boards bridging between the battens and placed suitably beneath the weak parts of the plasterwork. Support to the plaster would then be given by packing in bundles or pads of soft material on top of the boards.

Temporary support may be given to ribs, bosses, pendants, etc., by means of 'U' shaped loops of copper wire, the ends of which are passed up through small holes in the plaster and secured to the nearest

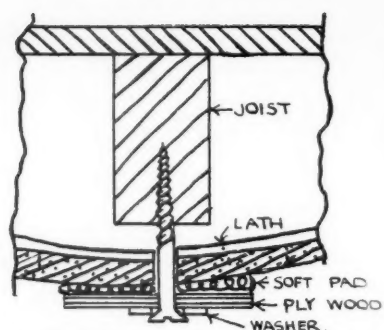
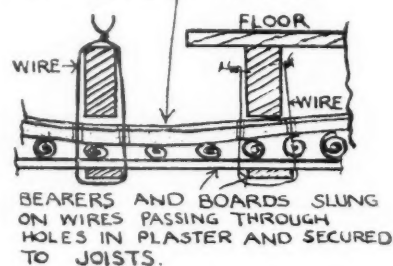


Fig. 1 (above). Fig. 2 (below)

LATH AND PLASTER SAGGED DOWN OWING TO FAILURE OF NAILING



available joist or other woodwork by pulling the ends tight and twisting them round a screw inserted in the wood; the wire should be kept from cutting into the supported plaster enrichment by means of soft padding or wrapping. Flat parts of a ceiling may be supported by suitably sized pieces of batten or light board placed flat against the plaster and pulled up by a wire loop at each end; the ends of each loop are brought up on the opposite faces of a joist and then twisted together (Fig. 2).

Examination from Above

It is essential to clean out all debris and dust from amongst the timbers, and from the upper surface of the laths and plaster. Such accumulations are sources of danger to the timbering and plaster. They absorb and hold moisture and are unhealthy from every point of view. After the heavier debris has been taken out a vacuum cleaner should be used to remove dust. The following defects should be searched for, and if found should be marked on the diagram.

Main Beams. The main beams should be examined for sap-wood, dry rot and excavation by wood-boring larvae. Particular attention should be given to the more inaccessible parts of the timbers, especially where they enter the walls and take their bearing. Shakes or any deep fissures, mortises, knot holes, etc., should be carefully examined. It is sometimes found that the main beams have developed horizontal shakes which run more or less continuously from mortise to mortise, and practically split the beam into two parts.

BEAM WITH CONTINUOUS SHAKE, DECAYED END, AND DECAYED PLATE IN WALL.

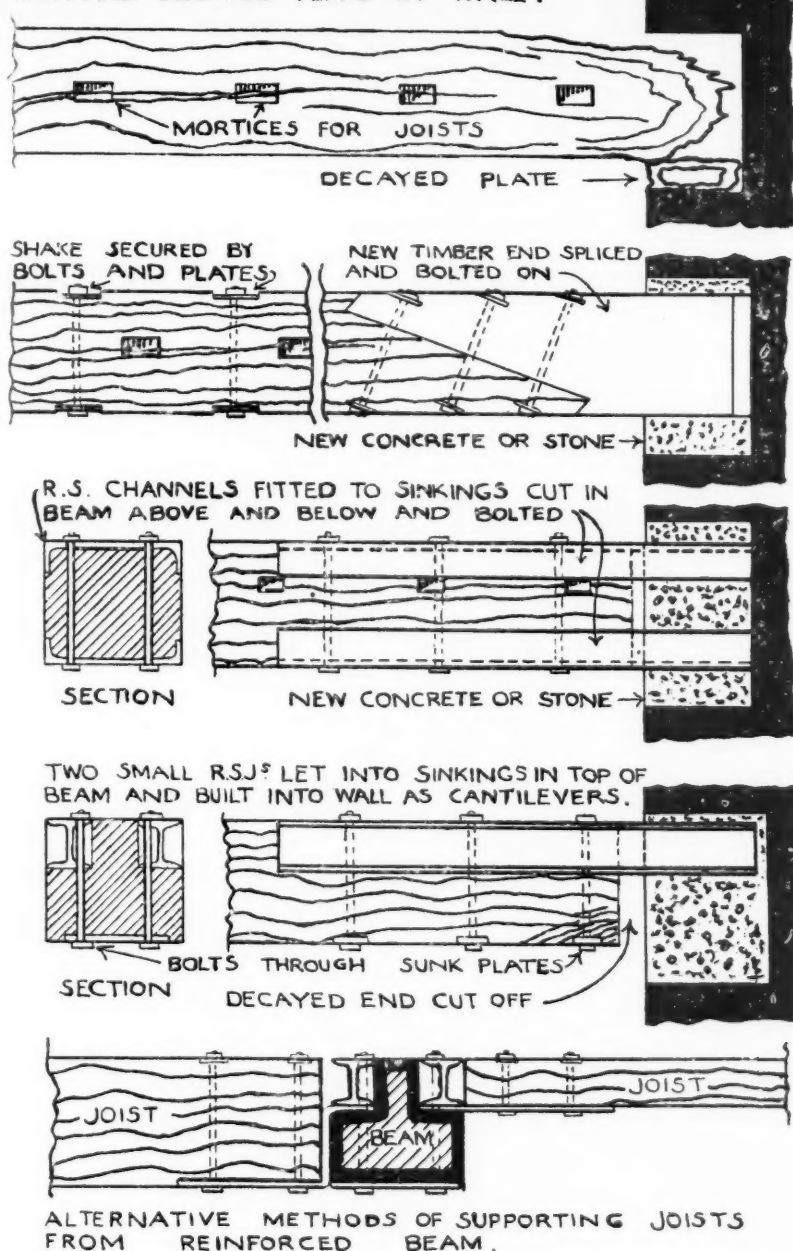


Fig. 3

Ceiling Joists. The ceiling joists should be examined for dry rot, excavation, sap-wood, etc., as in the case of the larger beams. Their tenons should be examined as far as possible, as any decay in the tenons or in the lower parts of the mortises leads to a drop in the ends of joists and sagging and cracking of plaster.

It is sometimes found that horizontal shakes have opened level with the underneath surfaces of the tenons so that the

lower portion of a joist or joists may be found to have dropped below the bottom of the beam and forced the laths and plaster down to a similar degree and fractured the plaster.

Sometimes the joists will be found to have pulled out from the beams to an appreciable extent, say, an inch or so, and there are cracks in the plaster lineable with the side of the beam; some of the laths may be torn away from their nails in the beam.

Ceiling Laths. All laths must be examined with special care if a safe estimate of condition is to be formed. Sometimes they will appear, on casual inspection, to be in good condition, but on probing them it may be found that the upper surface is merely a thin wafer of wood, while the body of the lath consists chiefly of dust, the result of excavation by furniture beetle or death watch beetle.

Attention should be given to the spacing of the laths. Even if they are quite sound and securely supported by their nails to the joists they may still be ineffective in giving full support to the plaster. It is often found that in ceilings where rent laths have been used they are too close together in some parts, and too far apart elsewhere owing to their uneven, wavy, or twisted shapes. In different parts of the ceiling, several laths may be found so close together that they have left practically no space for the plaster to squeeze through to form proper keys. In this way quite considerable areas of plaster may have little or no attachment to the laths and may have sagged away in consequence.

When examining the ceiling from above it should be ascertained whether any of the laths have come away from the joists. This can be brought about by decay of the laths or by corrosion of the nails holding them to the joists.

Cornices, Ribs and Pendants. Plaster cornices, ribs, pendants, bosses, etc. when comparatively small are usually solid. They were sometimes modelled direct on to ceilings, so that their plaster is more or less homogeneous with the ceiling plaster. They are not likely to suffer any damage other than cracking similarly with the adjacent ceiling plaster. If, however, these ornaments were modelled, or made in moulds away from the ceiling, and were then bedded on to the flat of the ceiling and secured by a few nails, there is a probability that any cracking of the ceiling will break and loosen parts of these raised decorations with the result that they fall away. Any loose portions should be taken down and numbered, so that they can be refixed later in their old positions.

Large features of this kind are made up as hollow shells of comparatively thin plaster, moulded or modelled on lathing nailed to wood profiles or brackets shaped to the general section of the feature. It is too often found that this concealed bracketing and its fixings to walls and beams is made of odds and ends of wood, too thin for the purpose, and containing much sapwood and other defects. Apart from decay and excavation by larvae, the defects for which to search include splitting of the brackets, and loosening at their fixings to the joists, and at their lower ends through decay or shrinkage in the wall blocks or plate.

Where there are curved covings running down from ceiling to cornice the curved ribs supporting the lathing of the cove are nailed at their upper ends to the sides of joists, and at their lower ends to wall blocks, or wall plate, in the same manner as described for cornices. When there is a

coving the cornice brackets have to be supported by means of wood cantilevers built into the walls and projecting the width of the cornice, there would also be some fixing to wall blocks or plugs. Here again the usual defects of splitting, decay, excavation, and loss of support through shrinkage in wall blocks or cantilevers should be looked for and recorded.

Methods of Repair

Methods of repair are dealt with in the same order as the defects, and the wood-work will be considered first.

Main Beams. When the wall ends of main beams are found to be attacked by dry rot, or are excavated by wood-boring larvae, it may be sufficient to cut away all the affected timber back to sound parts, and to treat the remaining wood with liquid dry rot destroyer or insecticide, but if the damage endangers the stability of the beam and its load, it will be necessary to reinforce the timber by some method which will entail the least amount of disturbance to the enriched plaster ceiling adjacent to the beam end.

There are several ways of reinforcing deficient beam ends. These include bolting on the sides either steel channels, or supplementary timbers. These methods, however, necessitate boring holes through the sound part of the beam for fixing bolts. Joists, supported by the beam, or running parallel with it do not as a rule leave sufficient space for either brace and bit or electrically driven boring apparatus. Removal of the obstructing joists would be out of the question in the case of an enriched ceiling. The alternative is to employ a method of reinforcement which will allow work on the beam end, such as shaping and boring, to be in a vertical direction. In Fig. 3 three methods of reinforcement are illustrated.

(i) A new timber end scarfed and bolted vertically with plates or large washers above and below the beam to distribute strain on the timber. During reinforcement operations the beam and some joists will require strutting up from the floor below, and this will necessitate cutting away some of the plaster, preferably plain parts, to get a solid bearing for struts on the undersides of the timbers.

Any joists which get their support by tenoning into the beam will lose their tenons during the scarfing operations, but they can be given permanent support after the scarf is completed by means of steel plates bridging across the top of the beam and supporting opposite pairs of joists by means of vertical bolts through plate and joist ends.

(ii) and (iii) The use of rolled steel channels and joists is shown in these two examples. In either case the steel reinforcements could be pinned into the wall as cantilevers, and so add considerably to the strength of the support.

In both cases a certain amount of cutting away of old timber is necessary to allow for housing the steel work, but all of this can be done vertically.

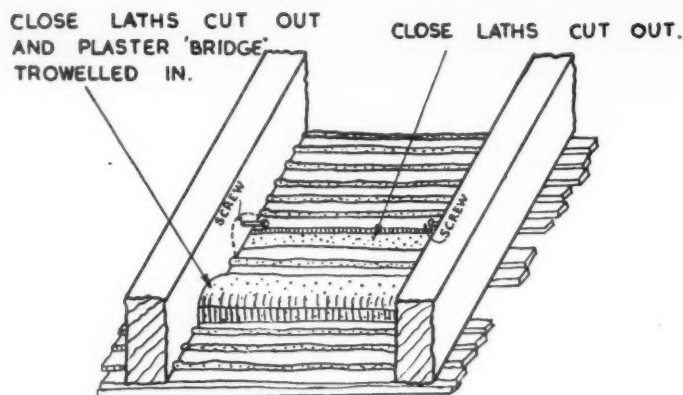
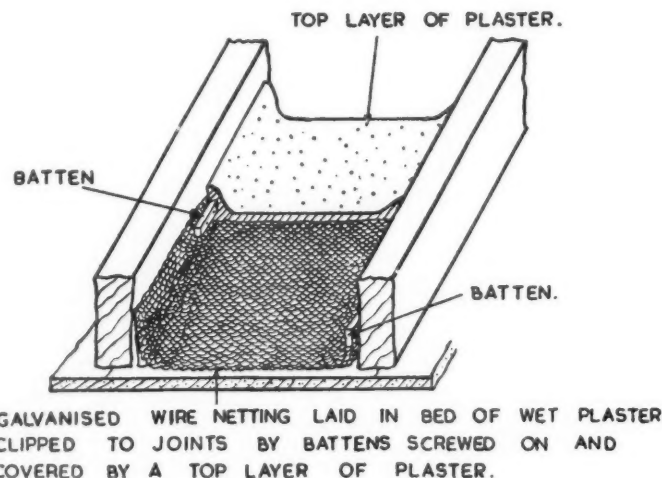


Fig. 4 (above). Fig. 5 (below)



In Fig. 3 is also shown a method of bolting to strengthen timbers which have long shakes or cracks, and also two methods of supporting joists by means of steel plates and bolts taking a bearing on the main beam.

Ceiling Joists. When joists have defective tenons, or have pulled away from their supporting beam, or have horizontal shakes at their ends they can be supported and strengthened by plates and bolts used in one of the ways already described.

If ceiling joists are found to be very badly decayed or excavated by larvae they should be treated in one of the following ways: Clean off all soft or decayed wood down to the solid parts, if any. Treat the remaining wood with a suitable insecticide or fungicide, and leave it *in situ*. Alternatively the defective joist should be taken out entirely, but in either case it will be necessary to insert a new timber to give necessary support to the lath and plaster. If the remains of the defective joist are left *in situ* the new one can be placed alongside and be screwed or bolted to it, and the ends can be cleated to the main beams. When the new joist has been fixed some

screws should be inserted from below to secure the laths to the new joist.

If the remains of the defective joist have to be taken out, it will be necessary to release the laths from it by cutting through the lath nails with a stout hack-saw blade worked under the joist. During operations such as those described the area of plaster work below must be well supported in one of the ways already described.

Laths and Plaster. When on inspection it is found that keying is deficient through laths being in places too close together it is advisable to give extra support by the method illustrated in Fig. 4. One or two of the laths should be removed by making a light cut, with a fine saw, at each end of the piece of lath showing between joists, and also at the centre, and then snapping the pieces out. This will expose the back of the plaster work, which should be brushed with a stiff brush to remove all loose pieces and then cleared of all dust.

A coating of shellac should be brushed over the exposed plaster, and over the laths adjacent to the void. The shellac solution should be in the proportions of 2½ oz. Orange shellac to 1 pint methylated spirit; it must be quite thin, so that it will

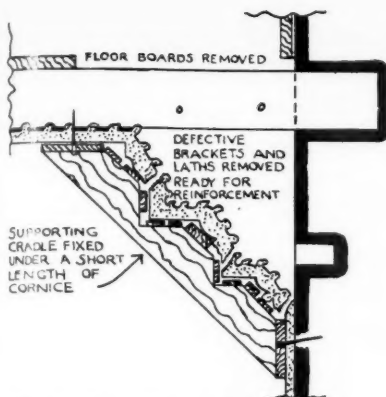
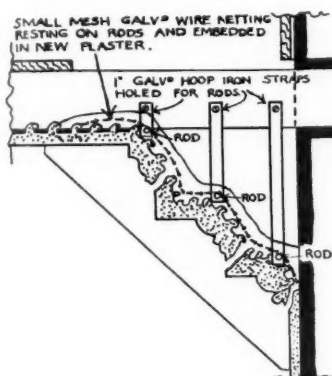


Fig. 6 (above). Fig. 7 (below)



PERMANENT FIXING BY MEANS OF SCREWS THROUGH LOOSE LATHS INTO JOISTS - GALVANIZED WASHERS FOR DISTRIBUTION OF SUPPORT AND WIRE GAUZE OR PERFORATED ZINC WASHERS TO PROVIDE KEY FOR PLASTER STOPPING.

Fig. 8

thick bed of retarded plaster laid in and well worked down into the back of the old plaster and into the cavities under the joists.

The wire netting is then placed in position and pressed down into the wet plaster, battens are screwed in position, and, finally, a second finishing coat of plaster is applied so as to complete the embedding of the wire netting and to cover in the battens (Fig. 5).

Bracketed Cornices. When hollow bracketed cornices or mock beams are found to have defective brackets, loose fixings, decayed laths, etc., they can be reinforced as shown in Figs. 6 and 7. Here again the decayed laths are replaced by wire netting embedded in retarded plaster. Support is given to the wire netting by thin galvanized iron rods hung in any convenient positions by hoop iron hangers screwed to the faces of joists. The work should be carried out in short lengths of about 1 yard at a time, always giving a treated section time to set and dry out before dealing with adjoining sections. The method can also be adapted and used on curved covings where the coving ribs and laths are defective.

Supports and Fixings. In using screws it is always advisable to employ washers to distribute the support rather than to depend only on the screw head to do this. If laths have to be lifted up to the underside of their supporting joists the washers should be of galvanized iron and should bear directly on the laths, etc. without any plaster between washer and lath. Ordinary flat washers do not offer any key or hold for plaster stopping which may be inserted afterwards to conceal the screw and washer. It is, therefore, a good plan to have a second washer of copper or bronze gauze or of perforated zinc. These washers

will present plenty of rough edges and perforations for the plaster stopping to key into (Fig. 8). In securing loose moulded ribs or ornaments to a ceiling it should be sufficient to use only the wire gauze or perforated zinc washers on the screws, provided that the pieces of plaster are of comparatively light weight.

When old ceilings contain comparatively large areas of plain flat plastering, which is well secured to the laths but traversed by many fine cracks, clean the old plaster thoroughly and apply a covering of fine scrim or muslin, with a mixture of flour paste and glue. If the ceiling is to be lime washed the scrim when dry should be painted with a coat of flat white, used thin, so as to penetrate the scrim and protect the paste and glue adhesive from the damp when limewash is brushed on. If the ceiling is to be painted, then the scrim-covered portions can be prepared in the usual way, with priming and undercoating.

It is not recommended that enriched antique plaster ceilings should be painted, as in course of time, repainting will destroy the sharpness of the modelling.

Materials for Repair Work

For all reinforcement work above and for filling in cracks or holes, it is recommended that superfine plaster of paris be used. It should be mixed with either a solution of glue size in water, or gelatine in water, and can thus be retarded in its setting for any convenient length of time, to allow completion of the operation in hand. It is best to find by experiment the strength of glue size or gelatine solution required for use with any particular consignment of plaster.

From size or gelatine make the strongest solution which when cool will still remain as a liquid and not set into a jelly. Then make up a small quantity of the plaster with the solution into a workable consistency, and time it in setting. By adding more water to the solution the time of setting may be reduced as required. It will probably be found that 20 or 30 minutes is sufficient time for handling the plaster in any of the operations described in these notes.

Whenever this retarded plaster is required to come in contact with the old plaster and to adhere firmly to it, the old plaster must be rid of all dust, and must be treated with a coat of thin shellac in methylated spirit. The solution should be tried out on some of the old plaster; it should soak in quickly, and when dry should not leave any glaze or varnish on the surface. The purpose is to bind looseness in the old plaster but not to destroy the key offered by its rough surface. The shellac solution should be of about the same colour, and about as liquid as strong tea before adding milk.

All woodwork supporting the ceiling should be treated with a liquid insecticide and fungicide such as 'Cuprinol'. The 'furniture beetle destroyer' variety, containing D.D.T. is suitable for this class of work.

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penetrate into the old plaster and bind it together, but must not leave a coating of varnish on the surface when dry.

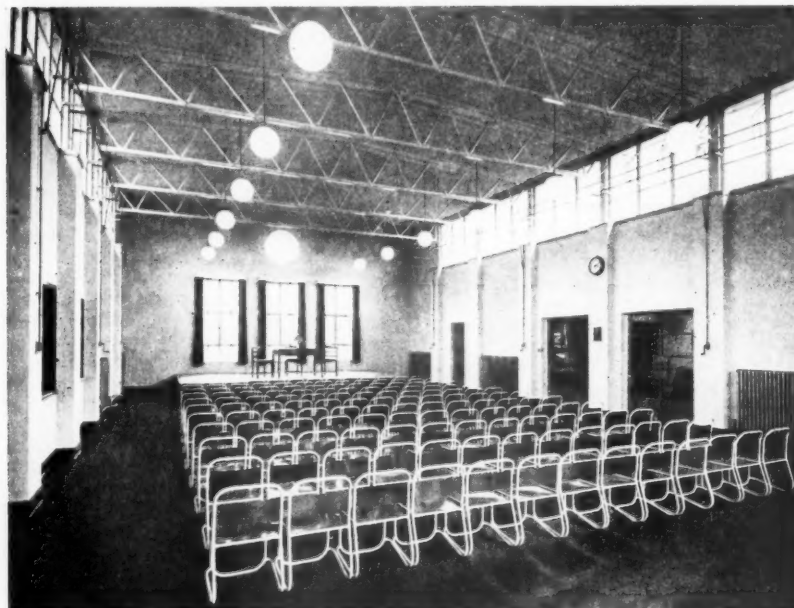
A screw should next be inserted low down on the face of each joist, opposite the void, and should be left projecting an inch or so. Finally, the void is to be filled with retarded plaster of paris, well trowelled in so that complete contact is made with the back of the old plaster, and built up about 1 in. above the tops of the laths to embed the projecting screws and form a bridge, spanning from joist to joist and supported by the screws. The inserted plaster will gain a very secure hold on the back of the old plaster if treated in the manner described.

In cases where laths are found to be seriously decayed, or excavated by larvæ, it will be necessary to give complete support to the plaster below, before commencing operations from above.

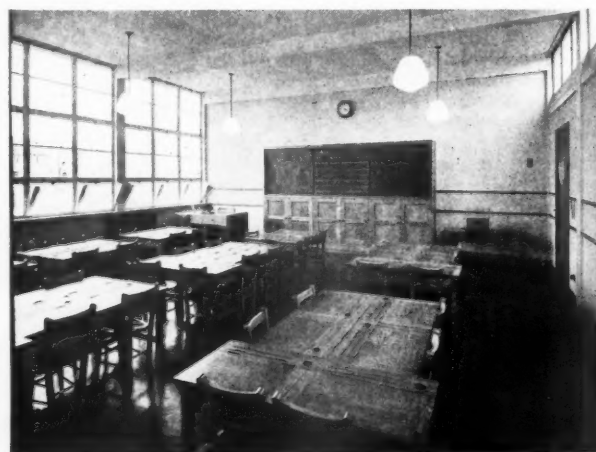
The decayed laths are first removed from a section between one pair of joists and about a yard long. After well brushing the exposed back of the plaster, and removing all dust, it should be treated with the thin shellac solution. Small mesh galvanized wire netting is then cut and bent to a trough shape, to lie between the joists and turn up closely against their vertical faces. Lengths of batten should be prepared and temporarily screwed against the faces of joists, to secure the wire netting. Battens and netting can then be removed and a



The entrance and one of the classroom wings



The assembly hall, looking towards the platform. It is lined with acoustic tiles. On the left are the service hatches to the kitchen



Left: the entrance vestibule Above: a typical classroom.

Infants' School at Littleover, Derbyshire

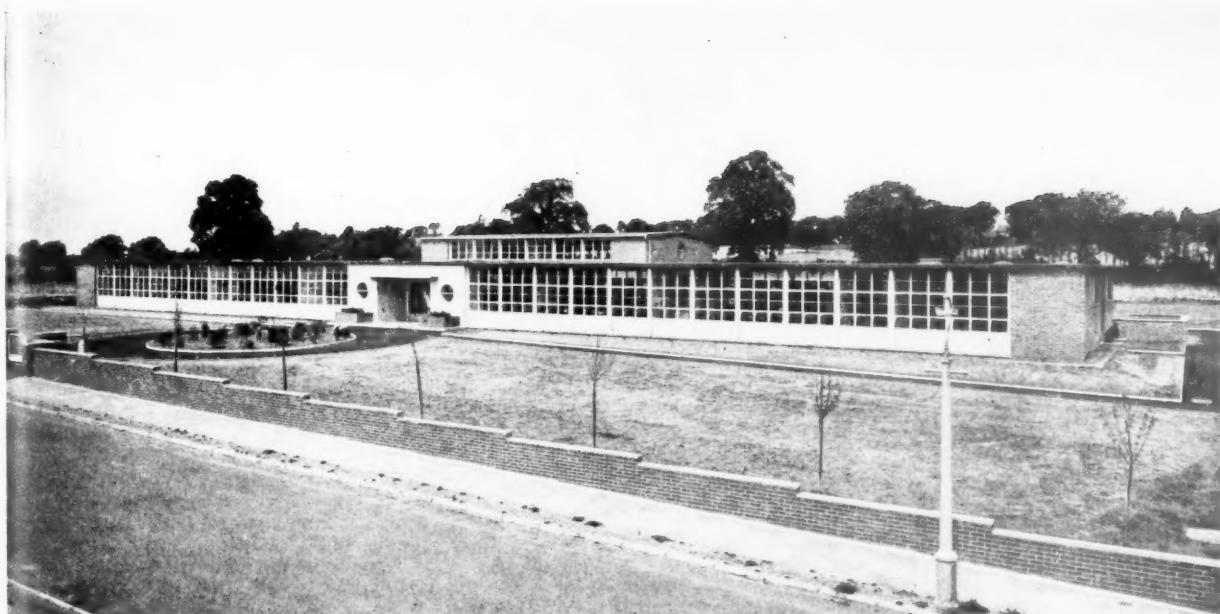
Architect: F. H.
Crossley, Dipl. Arch.
(L'pool) [A], County Architect

THIS SCHOOL HAS BEEN AWARDED the R.I.B.A. Architecture Bronze Medal for the three years ending 31 December 1949 in the area of the Nottingham, Derby and Lincoln Architectural Society. It is for 160 children aged 5 to 7. The site, which is large enough for a future nursery school for 80 children, is of 6 acres and rises gently from east to west.

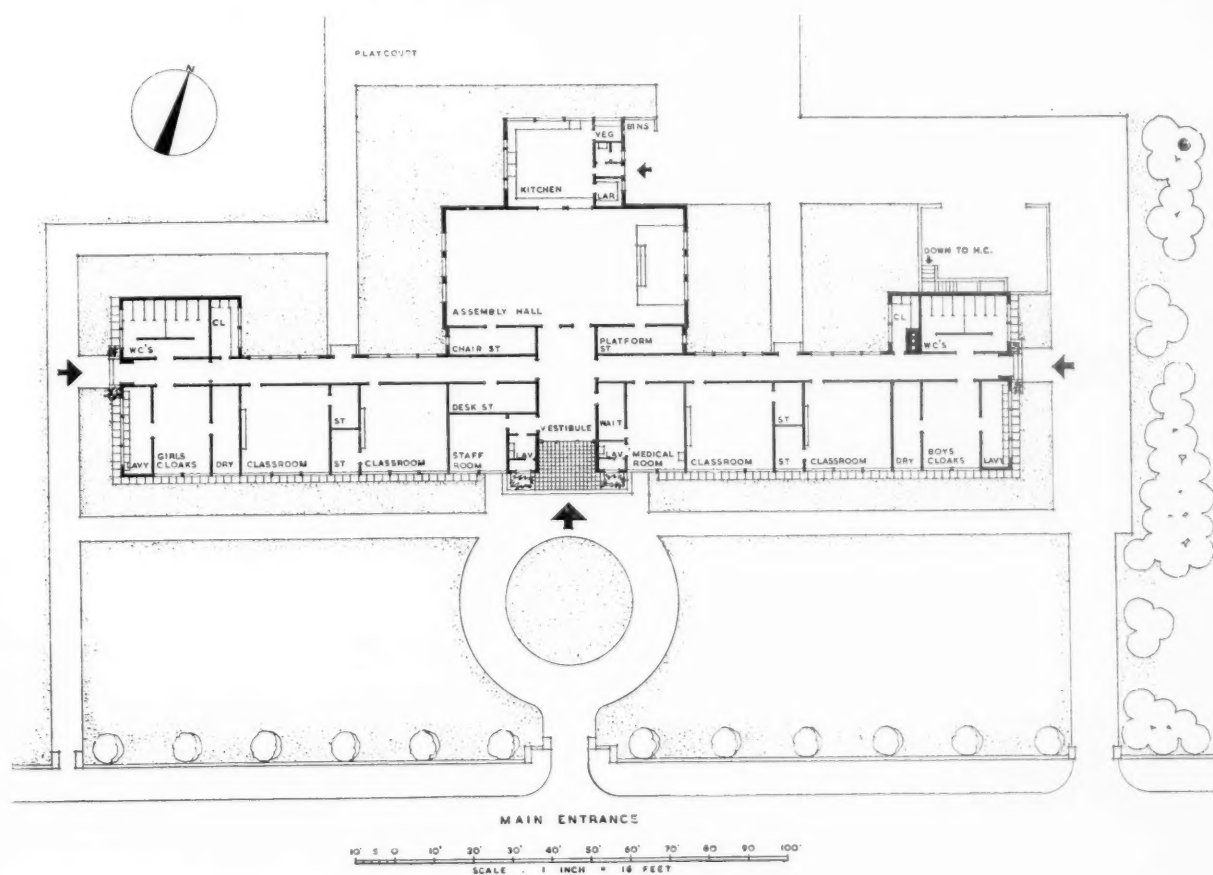
The building is of light steel construction, planned on a grid of 7 ft. 6 in. the walls being of brickwork. The flat roofs are of reinforced Thermacoust slabs, screeded and surfaced with Ruberoid.

The assembly hall, of 1,800 sq. ft., will seat all the children. The chairs are of movable, nesting type, and the stage is in sections and demountable. The classrooms have clerestory lighting on the north-west side. The floors are surfaced with lino in the classrooms, Granwood blocks in the hall and administrative rooms, brown pitch mastic in the corridors and granolithic in the cloakrooms and lavatories. Heating is by low pressure hot water. The windows are of steel, and the walls of plaster except in the lavatories and cloakrooms where flush-pointed sand-lime bricks are used.

The assistants associated with the design are J. E. Riley, Dip. Arch. (L'pool) [A], and G. R. Bruce, Dip. Arch. (Durham) [A], Assistant Architects; F. Ablett, Assistant Engineer; H. Harrison, Assistant Heating Engineer; H. J. Parrell, Chief Quantity Surveyor.



Above: general view of the school. Below: the plan. The construction is of light steelwork and brickwork, and is set out on a 7 ft. 6 in. grid. The flat roofs are of reinforced Thermacoust slabs surfaced with Ruberoid. The floors are of pre-cast concrete slabs



Practice Notes

Edited by Charles Woodward [4]

MINISTRY OF TOWN AND COUNTRY PLANNING. The Town and Country Planning (Development Charge Exemptions) Regulations, 1950, (S.I. 1950, No. 1,233) have now been approved and replace the previous Exemption Regulations (S.I. 1948, No. 1,188). The Regulations are made under Section 69 (2) (b) of the 1947 Act and refer to the new Town and Country Planning (Use Classes) Order, 1950 (S.I. 1950, No. 1,131). This Order came into operation on 21 July 1950.

The Regulations define 'cubic content' as meaning the cubic content ascertained by external measurement. The Schedule to the Regulations sets out the operations and uses which are exempt from development charge, the principal ones being as follows: Paragraph 1 extends from one-tenth of the cubic content to 7,500 cubic feet, whichever is the greater, the maximum amount by which a dwelling-house may be enlarged, or enlarged on rebuilding, free of charge. It also provides that any building which has been enlarged by more than the exempted amount (the appropriate development charge being paid) can be rebuilt as so enlarged without charge.

Paragraph 2 exempts the lateral conversion into flats of not more than three adjacent dwelling-houses erected before 1 July 1948. This provision includes the conversion of an individual house into flats (which was previously exempt) and extends to houses under requisition on 1 July 1948, and to war-damaged houses subject to a cost-of-works payment.

Paragraph 5 exempts conversions of, and improvements to, houses, and conversions of other buildings to dwellings approved under Part II of the Housing Act, 1949.

Paragraph 3 exempts various changes of use, mainly between classes specified in the new Use Classes Order, as follows:

The use of part of a dwelling house as a shop, limited to 200 sq. ft. of floor space, and the shop being carried on by a person living in the house. The use of a dwelling house which was in existence on 1 July 1948, as one of a variety of institutional and other uses, i.e., a church hall, home for old people, clinic, hospital, nursing home or social centre.

The use of a shop as an office, and vice versa. Changes of use between any of the special industrial classes.

Paragraph 6 exempts development within the curtilage of a dwelling-house (other than a dwelling, garage, stable, loose-box or coach-house), of any building, shelter or enclosure required for the enjoyment of the dwelling-house as such or for keeping poultry, bees, pet animals, birds or livestock for domestic needs, or personal enjoyment of the occupants.

Paragraph 8 exempts the erection, main-

tenance, improvement or other alteration of fences, walls, gates, posts or similar structures.

Paragraph 9 exempts the carrying out of operations or the use of any land for the display of advertisements. Paragraph 10 exempts on land used for any agricultural purpose, building or other operations (other than the erection, enlargement, improvement or alteration of dwelling-houses) necessary for the farming of the land for that purpose.

These Regulations do not affect the need to obtain planning permission and Byelaw or Building Act consent.

MINISTRY OF WORKS. The Ministry of Works have published *Precautions Against Fire and Explosion in Underground Car parks*, being No. 28 in the Ministry's Post-War Building Studies. It is a Report of a Sub-Committee appointed in 1946 by the Joint Committee on the Fire grading of Buildings of the Department of Scientific and Industrial Research and the Fire Offices' Committee. The Report is obtainable at H.M. Stationery Office, price 1s.

SELECTED APPEAL DECISIONS. Bulletin of Selected Appeal Decisions, No. VII, dated March 1950, is obtainable at H.M. Stationery Office, price 6d. The subscription for 4 issues is 2s. 4d. net, including postage, and the Bulletins are published at about three to four monthly intervals. They form useful guides to the principles upon which the Minister acts in deciding appeals from the refusal of permission by the local planning authority.

MINISTRY OF HEALTH. Circular 66 50, dated 30 June 1950, addressed to Housing Authorities, states that subject to the provisions of the Housing (Financial and Miscellaneous Provisions) Act, 1946, contributions of the amounts specified in the Act will be payable in respect of new houses completed before 30 June 1951.

ARBITRATION ACT, 1950. This Act, which consolidates the Arbitration Acts, 1889 to 1934, received the Royal Assent on 28 July 1950, and came into operation on 1 September 1950. It repeals the previous Acts except in relation to arbitrations commenced before its commencement, and it also repeals the Arbitration (Foreign Awards) Act, 1930. The enforcement of certain Foreign Awards is contained in Part II of the Act.

LAW CASES. In the NATIONAL BUILDER for July the case of *Nabarro v. Cope and Co.* (1938, 4 All E. R. 565) was referred to. The point was what duty, if any, the contractor owes to the building owner to afford safe access to inspect works in progress.

The facts were that the building owner when visiting the premises to inspect the work had been taken round by the foreman. On one occasion the building owner

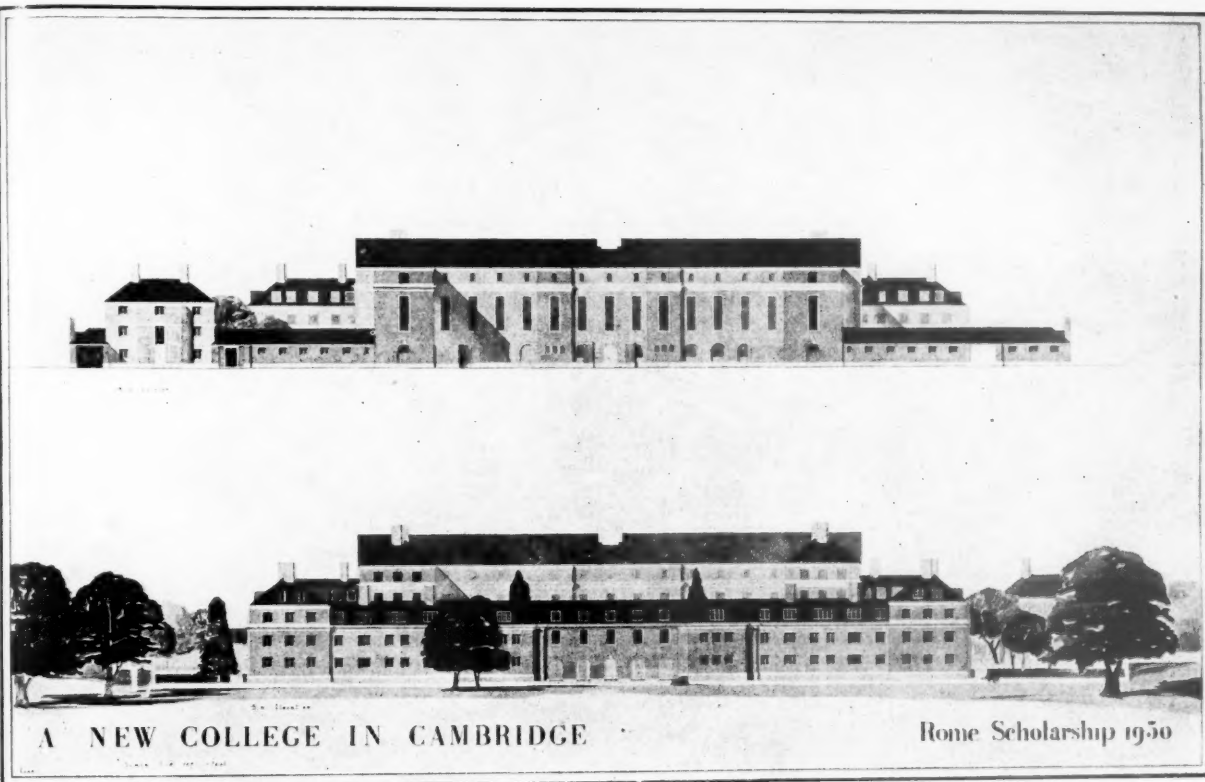
told the foreman that he would be visiting the job about noon on the following Saturday. When the building owner arrived the foreman was absent, but a sub-contractor's labourer, being told that he was the owner, said 'he had better go in and see how things were going on'. The building owner then entered the premises. He stepped on a short plank which appeared to him to slip and tilt up causing him to fall and injure himself. He brought an action against the contractors on the ground that they were negligent in leaving the plank in a dangerous position, that he was entitled to assume it was safe and that he was entitled to damages for his injuries.

In the course of his judgment the Judge pointed out that if the position was that the defendants were the occupiers of the premises and the plaintiff was an invitee or even a licensee (which he was not since he had not the defendant's permission to be on the premises) the plaintiff would have had a clear case.

The contractor did not expressly give the plaintiff the right to enter the premises whenever he chose and the law will not imply that, apart from an express right, the owner has any general right to enter premises and inspect works in progress whenever he desires. Unless therefore the defendants themselves or by a competent agent had given the plaintiff permission to enter and inspect on the day of the accident or were informed that he would be there for that purpose and acquiesced to him doing so they would be under no duty to him to see that the premises were reasonably safe for inspection or where they were not safe to warn him of the danger.

On all previous occasions when he visited the works the foreman had conducted him round. Had the accident occurred on one of those occasions and there had been no warning the defendants would have been liable. The fact that he had several times inspected the works under the guidance of the foreman however did not mean that the defendants had acquiesced in him visiting the works and going round them by himself without a guide. The sub-contractor's labourer who had said to him that 'he had better go in and see how things were going on' had no authority to bind the defendants and what he had said did not help the plaintiff. And the Judge decided that the mere fact that the plaintiff had intimated that at some time on the Saturday about noon he would or might come in was not sufficient to put the defendants under the duty of seeing that from noon onwards on the Saturday, during the whole of the rest of that day, the premises were in a safe and secure position for him to walk about them. Summing up the case, the Judge gave judgment in favour of the defendants, the contractors.

SHOPS ACT, 1950. This Act, which consolidates the Shops Acts, 1912 to 1938, received the Royal Assent on 28 July 1950, and is to come into operation on 1 October 1950. The previous Acts will be repealed as from that date.



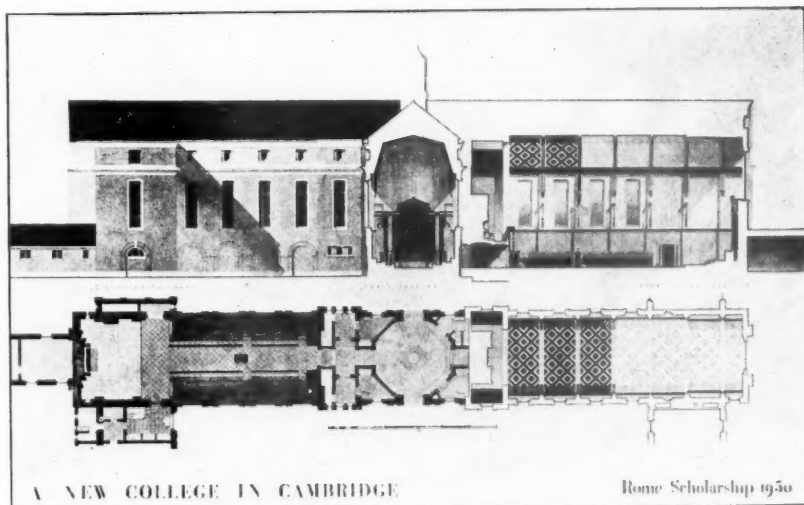
The Rome Scholarship in Architecture

THE FACULTY OF ARCHITECTURE of the British School at Rome have awarded the Rome Scholarship in Architecture for 1950 to Mr. Edward Carter (Student, R.I.B.A.), of the School of Architecture, King's College, Newcastle-upon-Tyne (University of Durham).

The subject was a new college on the outskirts of Oxford or Cambridge to accommodate a Master, 8 Resident Fellows and approximately 120 Undergraduates. The candidates had to state their choice of University. The sets of rooms for Fellows and Undergraduates had to be planned with access from staircases rather than from corridors.

The site was wooded and sloping towards the south-west from a road along the north-east boundary. The frontage was 475 ft. and the depth 300 ft., there being a fall of 10 ft. in the latter. Special attention had to be given to the grouping of the buildings and the planting of the site. Three or four tennis courts were considered desirable.

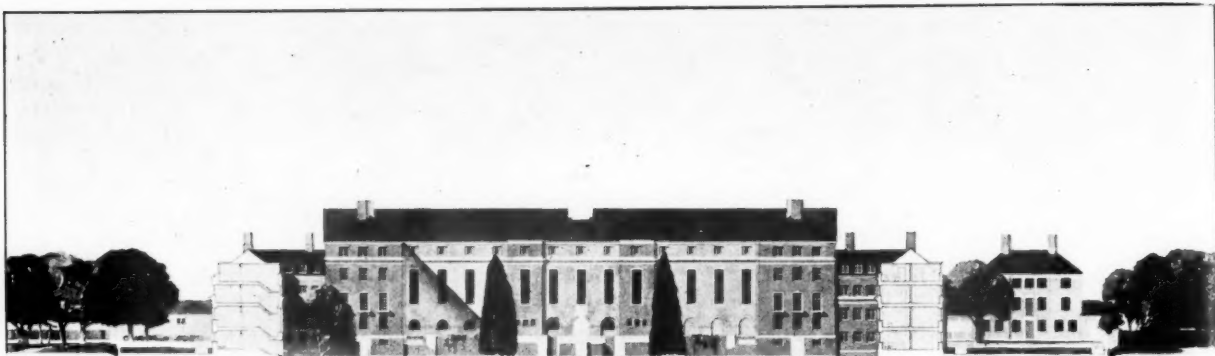
The accommodation included a hall, chapel and a Master's house, the last being integral with the college buildings or separ-



ate as desired. The sets of rooms for eight Fellows were to consist of a sitting room, bedroom, waiting room and preferably a bathroom and lavatory. The sets for six non-resident Fellows were to consist of a study and waiting room. The Undergraduates' rooms were to consist of a sitting room and bedroom. Other rooms required were a library, four lecture rooms, senior common room, junior common room, servants' common room, bicycle house and garage.

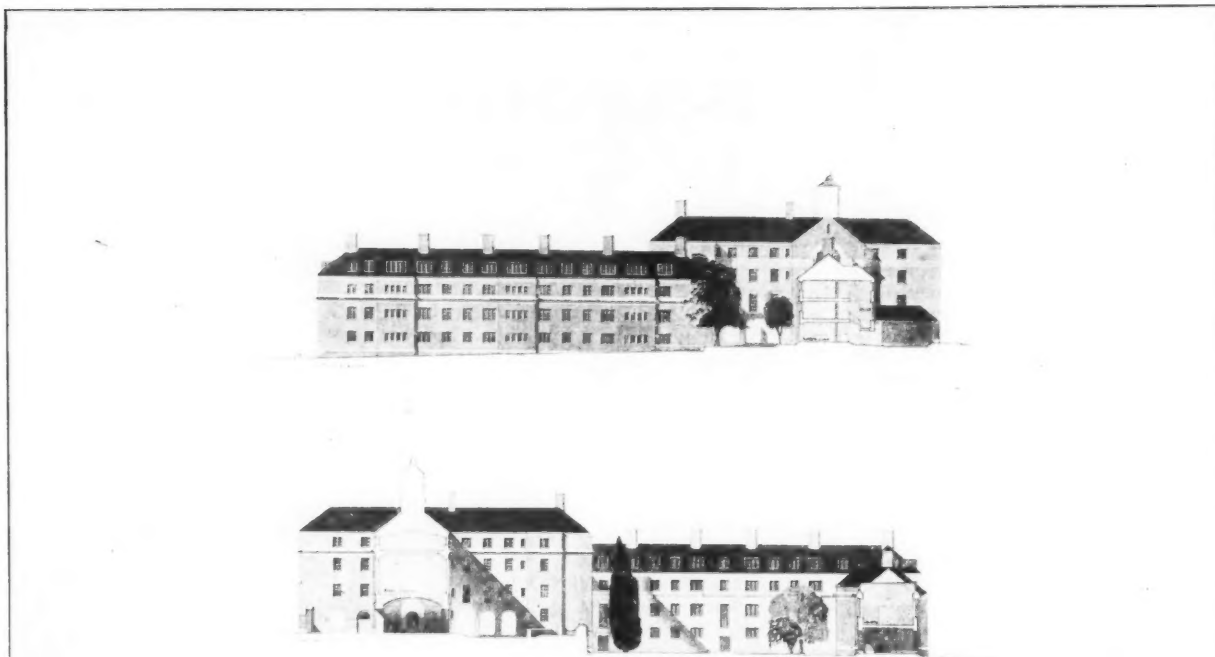
Mr. Carter, who is 25 years of age, served for three years in the R.A.F. and has just completed his architectural course at Newcastle. His design was one of the few submitted which followed the traditional symmetrical lay-out and having the hall balancing the chapel. The library on the first floor above an arcade terminates the central axis.

The Rome Scholarship in Architecture is provided for by an annual grant made to the British School at Rome by the Council of the Royal Institute of British Architects.



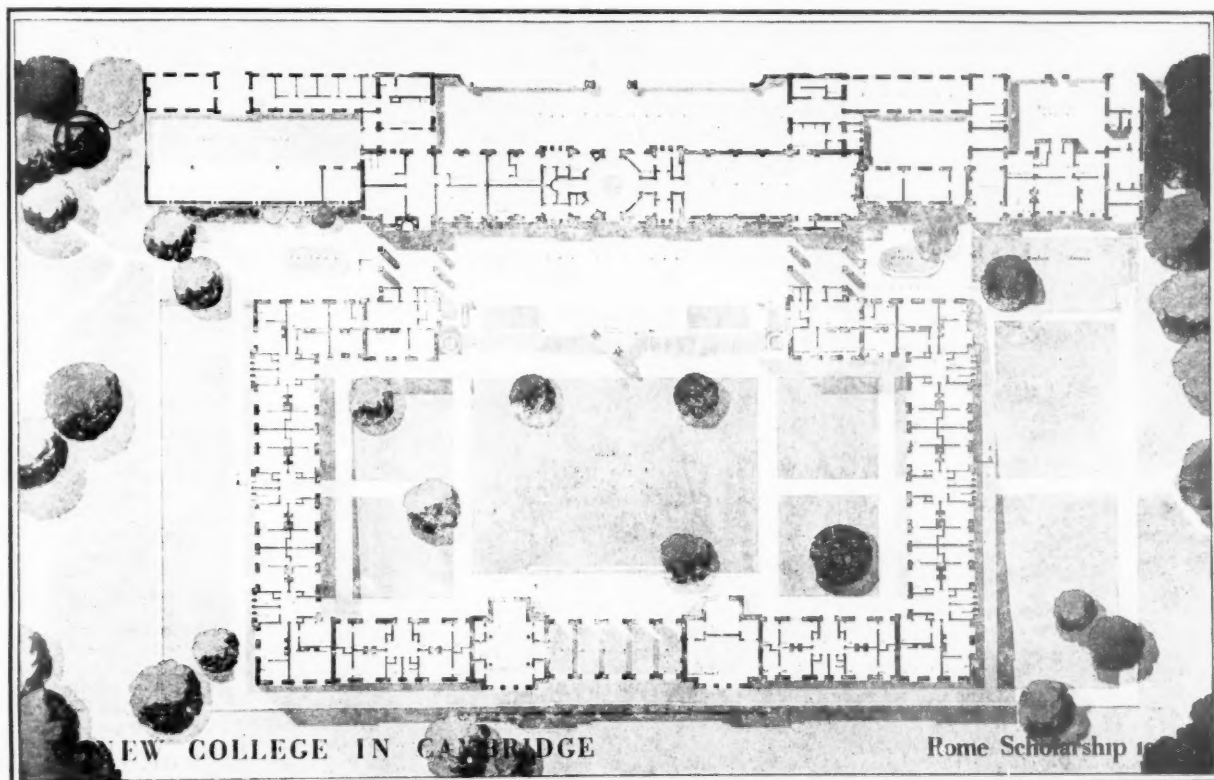
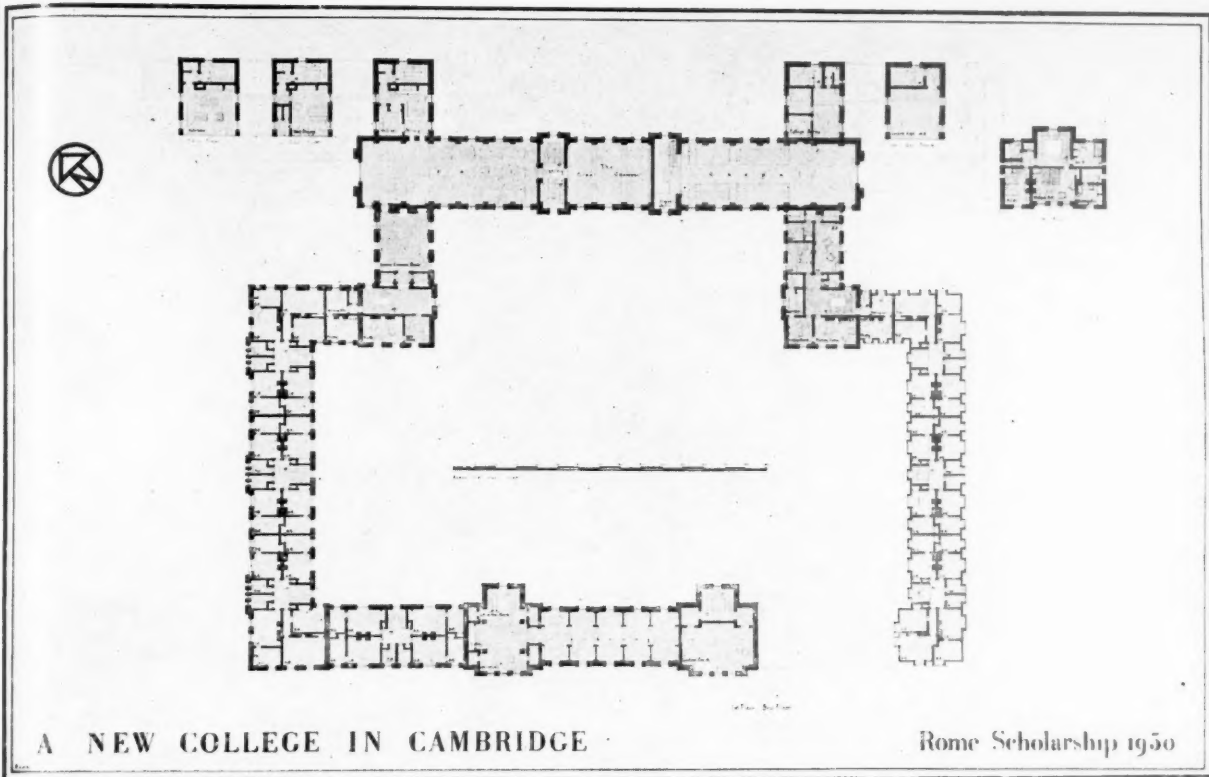
A NEW COLLEGE IN CAMBRIDGE

Rome Scholarship 1950



A NEW COLLEGE IN CAMBRIDGE

Rome Scholarship 1950



Book Reviews

Urban Geography, by Griffith Taylor. 8½ in. xv+439 pp. text illus. Methuen and Co. 1949. £1 5s.

Man—western man, at any rate—is nowadays predominantly a town-dweller. Professor Griffith Taylor, appreciating this fact more clearly perhaps than some of his fellow geographers, has compiled what is probably the first comprehensive text book in English on urban geography. Primarily written for sociologists and planners, it provides informative reading for all who are interested in the evolution of the modern town. Easy reading, too. The author has a flair for conducting intricate operations with facts and figures which can be followed comfortably by the casual reader as well as by the statistician. He has borrowed, of course, fairly large chunks

from Lewis Mumford, to whom he makes generous acknowledgment, but the book stands, on its own merits, as an able study of a neglected theme. J. C. P.

The Autobiography of an Idea, by Louis H. Sullivan. With a foreword by Claude Bragdon. 8½ in. 330 pp. New York. Peter Smith. 1949. \$3.50.

Louis H. Sullivan died in 1924 at the age of 68. Already, it appears, the *Autobiography of an Idea*, which is, of course, Sullivan's own life story, had been published and there was another edition in 1926. It is a pity, incidentally, that the present edition does not give any exact information about the autobiography, the date when it was written or under what circumstances or Sullivan's procedure or intentions with regard to its publication. It needs some explanation. It is the work of a great artist, but also of a colossal

sentimentalist, with a facility in writing a kind of rhetorical prose which, to the modern reader, is singularly unpalatable. Further, it deals only with the author's early life, his years in Paris at the Ecole des Beaux-Arts and his entry into partnership and architectural practice. Of the events of his later career there is disappointingly little. Still, the *Autobiography* is a fascinating document in its way, gushing with the innocent self-love of the self-made America of the turn of the century, the rugged, generous, loose-limbed, eternally philosophizing America invented by Whitman and Emerson. Nobody who opens the book will fail to recognize how much another autobiography owes to it or to be reminded that Sullivan was Frank Lloyd Wright's *lieber meister* in his early days and, probably, the greatest influence in his career.

JOHN SUMMERSON [4]

Notes and Notices

NOTICES

Architectural Science Board

Architectural Science Board Lecture, Tuesday 24 October 1950. A lecture will be given on Tuesday 24 October 1950 at 6 p.m., when Mr. C. H. Aslin [F] will read a paper on *Specialized Developments in School Construction*.

BOARD OF ARCHITECTURAL EDUCATION

The R.I.B.A. Final Examination, July 1950

The Final Examination was held in London, Birmingham, Leeds, Edinburgh, Manchester, Newcastle and Belfast from 5 to 14 July 1950.

Of the 406 candidates examined, 164 passed as follows:—

Passed Whole Examination	51
Passed Whole Examination subject to approval of Thesis	58
Passed Part 1 only	54
Passed Part 2 only	1
	164

242 candidates were relegated. The successful candidates are as follows:—

Whole Examination

*Ainsworth, Ronald A.	Cromwell, Peter
Allerton, John R.	Dawson, Donald S.
Astorga, Thomas D. W.	(Distinction in Thesis)
*Bailey, Harold	Day, Leslie J.
*Bamford, George S.	*Drury, Brian W.
*Bayliss, William B.	Edgecombe, John F.
*Bellears, Edwin	*Ellis, Keith H. N.
*Binnington, Roy	*English, Anthony
*Bond, Derek O.	*Evans, John H.
Bourne, Edmund M.	Fenwick, Hubert
(Distinction in Thesis)	W. W.
*Browne, George R.	Ferguson, Morris H.
Butcher, Geoffrey O.	*Ferin, Harold R. S.
Butler, Anthony W.	*Fidler, Donald M.
Choksey, Pesi J.	Fielding, Ronald H.
*Clarke, D. Howell P.	*Finkle, Gerald M.
*Clark, Roy V.	*Fitt, Richard H.
*Clifford, W. Michael	*Foster, Langton T.
Coakes, Peter A.	Francis, Michael R.
*Coles, Kenneth D.	*Halford, Frederick S.
Collinson, Peter A.	*Ham, Arthur J. L.
*Crane, Gerald E.	*Hampton, Peter
	*Hands, Dennis C.

*Head, Alfred E.	*Roberts, Keith H.
Hewitt, Brian M.	*Robertshaw,
Hodges, A. E. John	Joseph A.
*Holwell, Alan	*Russell, Peter S.
Hubert, David W.	Samuels, Frederick S.
(Distinction in Thesis)	*Sanford, Anthony P.
Hughes, Kenneth S.	*Savage, Cecil P.
*Hughes, Merle L.	Scott, James M. I.
*Hurley, Leslie A.	Sharp, Alan G.
James, Michael	*Shaw, Denis
Jones, P. Eldon	Shepherd, William D.
Katten, Hans G.	*Sleigh, Francis J.
Kershaw, Joyce	Spenceley, Peter J.
(Mrs.)	*Stafford, Leonard
Kett, Brian D.	J. A.
*Kirby, Anthony J. G.	*Stevens, James C.
Knight, Peter H.	Stickings, Joyce D.
Last, Ramon P.	(Miss)
(Distinction in Thesis)	Stockley, Rosemary
*Leathart, J. Anthony	H. J. (Miss)
Locke, Peter E.	*Stokes, Arthur T. J.
(Distinction in Thesis)	*Stott, Derek T.
Lomas, James H.	Stutchbury,
(Distinction in Thesis)	Wycliffe W.
*Mackenzie, Samuel	*Swindale, George E.
Marshall, Julia de B.	*Tench, George D.
(Miss)	Thomas, Ralph D.
Mason, Robert J.	*Thomas, Robin P.
*Matthews, John	*Tiedeman, John R.
W. K.	Tindall, Bryce W.
*Mayne, Albert T.	Treglown, Gerald P.
*Mills, Geoffrey W.	Turner, Raymond G.
*Mobbs, Ronald H.	*Vanstone, Alan
Murray, Michael G.	*Vick, Francis N. H.
Noble, C. Wycliffe	Warner, John E.
*Pell, Arthur	(Distinction in Thesis)
*Pike, Alexander	*Watson, Gordon I.
T.H.P.	Wells, Pamela A.
*Purkis, John C.	(Mrs.)
Ratcliffe, Alan F.	*Westrope, Fred-
Ratcliffe, Colin B.	erick H.
Rennison, Peter T.	
(Distinction in Thesis)	
*Subject to approval of Thesis.	

Part 1 Only

Alford, Michael G.	Bradley, Albert S. E.
Aylott, Iris D. (Miss)	Campbell, D. W. Ian
Aylwin, Jill M. M.	Cashin, Alfred M.
(Miss)	Clark, Ruth M. (Miss)
Baker, Albert T.	Cook, Kenneth D. A.
Baldwin, John E.	Cornelius, Sydney K.
Benoy, Alec L.	Courtenay, Roy-
Benoy, Kenneth W.	ston R.

Ellis, Leonard J.	Nevin, Richard M.
Emerson, John B.	Pantlin, John S.
Forbes-Nixon,	Price, Raymond M.
John D.	Raimes, Alan S.
Fryman, John G.	Rice, Beatrice M.
Gorniak, Franciszek	(Miss)
Gowings, Peter R. C.	Rice, John A. P.
Grant-Nelson, Alex-	Ridgwell, Peter H.
ander Wm.	Riddale, Richard O.
Harvey, Graham E.	Shuttleworth, David
Herd, G. Priscilla	Skrobanski,
(Miss)	Sygmunt J.
Janes, Stanley E.	Staley, Sheila M.
Jepson, Frank C.	(Miss)
Jolley, Frederick	Sunderland, Maurice
C. E.	Tabraham,
Josefowicz, Stefan T.	Graham D.
Kellaway, Stanley A.	Turner, Maurice W.
Lloyd, John	Waskett, Arthur H.
Lucas, Pamela (Miss)	Whitcomb, Henry F.
Lawrence, David H.	Williams, Elwyn T.
Makowska, Zofia	White, Basil P. F.
(Miss)	Wilde, Peter H.
Mlek, Wojciech	Wiseman, Edward G.
Moorby, Richard P.	

Part 2 Only

Collins, John E.
The R.I.B.A. Special Final Examination, July 1950
The Special Final Examination was held in London, Birmingham, Leeds, Manchester, Newcastle, Edinburgh and Belfast from 5 to 14 July 1950.

Of the 375 candidates examined 103 passed (29 in Part 1 only) (2 in Part 2 only).

272 candidates were relegated. The successful candidates are as follows:—

Whole Examination

Aldred, Edward	De Lara, Louis G. C.
Aldridge, Stanley E.	Dempster, William
Allsopp, Cecil J.	Dyer, Ronald J.
Bacon, Leslie V.	Edwards, John M.
Badham, Douglas J.	Elliott, John E.
Bannister, Edward	Ellis, Norman E. T.
J. T.	Fraser, Michael G.
Billington, Edgar J.	Gadd, Ronald D.
Birch, Albert C.	Goddard, George L.
Brown, Reginald J.	Godfrey, Gordon
Bull, Stanley J.	Goodhew, Philip A.
Burgess, Robert	Gray, George T.
G. W.	Green, Arthur R.
Chamberlain, George	Hammond, John W.
Cole, Eric G.	Hanchet, Sidney J.
Crease, John T.	Hickman, Denis R.
Crick, Arthur L. R.	Hope, James A. K.
Croydon, Frederick	Horlock, Leonard E.
W. T.	Howell, Owen J.

Jordan, Edith T. (Miss)
 Keating, Philip F.
 Kelly, George D.
 Kemp, John
 Kendall, Victor J.
 Kimm, James
 Knight, Henry R. E.
 Lawson, Arthur W.
 MacGregor, Donald R.
 Malins, E. Thomas
 Martin, Reginald G.
 Matthews, Gerald R.
 Mitchell, Malcolm L.
 Morley, Henry F.
 Murcutt, Frederick G. H.
 Oliver, Charles J.
 Parfitt, A. John
 Peterson, Leif N.

Price, Leslie R. C.
 Robinson, Keith D. H.
 Rogers, Leonard G.
 Simmons, Sidney
 Smith, Donald J.
 Smith, Douglas D.
 Sparks, Robert A.
 Spon, James A.
 Stonard, Horace S.
 Struthers, John R.
 Tate, John W.
 Thomas, Anthony E.
 Thomson, William
 Thurlow, Ernest H.
 Van Winsum, Henderik J.
 Wanstall, Herbert C.
 Ward, Frederick H.
 West, Ronald E.
 Wood, Douglas R.

Part 1 Only

Attridge, Ralph
 Axon, Thomas F.
 Bailey, George F.
 Bell, William A. J.
 Birchett, Denis A.
 Blackie, David R.
 Brady, Lawrence H.
 Downs, Leslie F. J.
 Firth, Cedric H.
 Foster, Christopher H.
 Gardner, Peter M.
 Green, Harold E.
 Greenway, Robert E.
 Hagger, B. J. Leslie
 Harvey, Frederick E.

Part 2 Only

Fuller, James S. W. Weatherill, Leonard W.

The following candidates have also passed the Special Final Examination:—

Buck, Harold D. R. Clarkson, Harry
The Examination in Professional Practice for Students of Schools of Architecture Recognized for Exemption from the R.I.B.A. Final Examination.

The Examination was held in London, Manchester, Newcastle and Edinburgh on 11 and 14 July 1950. Of the 40 candidates examined, 37 passed and 3 were relegated. The successful candidates are as follows:—

Adam, Douglas G.	Meehan, George
Baker, Christine A. S. (Miss)	Morrison, James
Ballantyne, James I.	Morton, Colin Y.
Bather, Leonard M.	Mowat, Ian G.
Bracewell, Arthur G.	Nowosielska-Slepown, Anna M. (Mrs.)
Brodie, Barbara N. (Miss)	Nairne, Alexander D. M.
Brown, Melville C.	Neil, John
Davie, William T.	Orr, William P. (jnr.)
Deed, Alan J.	Parry, Robert L.
Drummond, John	Paton, James M.
Faulds, Walter W.	Scott, Thomas R.
Fotheringham, Charles	Schonberg, Thomas B. H.
Gibb, John A.	Shaw, Robert A.
Harrison, William C.	Shinclair, Maria S. F. (Miss)
Hodge, Andrew J.	Singer, Joseph
Hopper, Frederick W. (jnr.)	Thomson, William C.
Inglis, Joyce B. (Miss)	Wilson, Alexander D.
Kinghorn, Gordon J.	
McLachlan, John	
Macmillan, Angus B.	

Examination for the R.I.B.A. Diploma in Town Planning

At the Examination held in July 1950 the

following candidate was successful and has been awarded the R.I.B.A. Diploma in Town Planning: Arthur Roger Pearce [A].

COMPETITIONS

Rebuilding of Coventry Cathedral: Architectural Competition

The Reconstruction Committee invite architects who are British subjects resident in the United Kingdom, the British Commonwealth or Eire to submit designs in competition for a proposed new Cathedral, Chapel of Unity and Christian Service Centre to be erected on a site in the centre of Coventry.

Assessors: Sir Percy Thomas, O.B.E., LL.D., D.L. (Past President); Mr. Edward Maufe, R.A., M.A. (Oxon) [F]; Mr. Howard Robertson, M.C., A.R.A. [F].
 Premiums: £2,000, £1,500, £1,000.

Last day for submitting designs: 2 July 1951.
 Last day for applying for conditions: 30 October 1950.

The Schedule of Conditions and particulars of site, etc., will be ready for issue about the beginning of October, and in the meantime intending competitors should make application to Captain R. T. Thurston, M.C., Secretary to the Reconstruction Committee, 22 Bayley Lane, Coventry, enclosing a deposit of £2 2s.

Architectural Competition: Nairobi City Hall

The Municipal Council of Nairobi, Kenya, invites architects resident in the United Kingdom and all British Dominions, Colonies and Dependencies to submit designs in competition for new City Halls and Offices which it proposes to erect in Nairobi.

Assessor: Prof. L. W. Thornton White [F], Cape Town.
 Premiums: £550, £450, £250.

Last day for posting designs: 19 October 1950.
 Conditions may be obtained on application, preferably by air mail, to the Town Clerk, P.O. Box 651, Town Hall, Nairobi, Kenya. Deposit £2 2s.

ALLIED SOCIETIES

Changes in Officers and Addresses

Northern Architectural Association—Cumberland Branch. Hon. Secretary, Mr. R. A. Stewart [A], 'Strathlene', 8 Lismore Place, Carlisle.

Bristol Society of Architects. President, Mr. H. S. W. Stone [F], 20 The Crescent, Taunton.
Coventry Society of Architects. Chairman, Mr. Rolf Hellberg [F], 13 Queen Victoria Road, Coventry.

West Yorkshire Society of Architects—Huddersfield and District Branch. Chairman, Mr. Watson Rowe, F.R.I.C.S. [L], 11 Cloth Hall Street, Huddersfield.

Devon and Cornwall Architectural Society—Plymouth Branch. Hon. Secretary and Treasurer, Miss Margaret Driver [A], 26 St. Hilary Terrace, Stoke, Plymouth. (Telephone: Devonport 805.)

Indian Institute of Architects. President, Mr. Walter S. George, A.R.C.A. [F], 1 Scindia House, New Delhi, India.

Ontario Association of Architects. President, Mr. Hugh P. Sheppard, 52 Chatham Street West, Windsor, Ontario, Canada.

Alberta Association of Architects. President, Mr. T. Gordon Aberdeen, 108 Agency Building, Edmonton, Alberta, Canada. Hon. Secretary, Mr. George W. Lord, 11422 Jasper Avenue, Edmonton.

Liverpool Architectural Society. Hon. Secretary: Mr. Francis J. M. Ormrod [F], 21A, Fulwood Park, Liverpool, 17.

GENERAL NOTES

Society of Chemical Industry

A joint meeting of the R.I.B.A. and the Road and Building Materials Group of the Society of Chemical Industry will be held on Thursday 19 October 1950 at the lecture hall of the Institution of Structural Engineers, 11 Upper Belgrave Street, S.W.1, at 6 p.m. when Mr. R. F. Schaffer of the Building Research Station will read a paper on *Building Stones of London*.

R.I.B.A. Cricket Club

The R.I.B.A. cricket team wound up their season with an enjoyable fixture against a Club Cricket Conference side on the delightful ground at Guildford. The match was kindly arranged by a member of the Guildford C.C., and all the amenities necessary for a complete cricketer's requirements were available.

The R.I.B.A. won the toss and compiled 99 runs before lunch for the loss of 7 wickets, of which D. L. Robinson contributed a sparkling 50. After lunch, rain unfortunately prevented play until 3.45, when the R.I.B.A. resumed their innings, and added a further 48 runs. Tea was then taken, and the C.C.C. were left with two hours to obtain 148 runs, a feat which they accomplished easily.

It is hoped that the fixture may be repeated next year, and that some new players will come forward to strengthen the side for this fixture; names, please, to the Hon. Sec., R. R. Fairbairn [A], 81 Piccadilly, W.1.

R.I.B.A.

D. L. Robinson c Cooper b Henwood	50
D. Harris b Henley	0
F. Mills lbw b Allen	6
P. d'Almeida b Allen	0
C. A. R. Norton c Fleming b Hebden	5
L. H. Hammond b Hebden	0
D. G. Small c Fleming b Hebden	48
A. Douglas b Hebden	6
F. G. Cooper b Henley	1
J. G. Batty c Parsons b Sherwood	46
R. R. Fairbairn run out	0
R. Davison not out	1
Extras	11
Total	147

C.C.C.

P. V. V. Sherwood run out	106
A. B. D. Parsons c Small b d'Almeida	28
B. Allen c Davison b Harris	29
L. G. Henwood not out	33
Extras	5

Total for 3 wickets. 201

G. L. Hebden, D. G. Fleming, G. A. Saulez, T. E. Cooper, L. Allen, C. C. Davis, D. G. Henley and D. Barnes did not bat.

R.I.B.A. Golfing Society v. R.I.C.S. Golfing Society

Meeting held at New Zealand Golf Club. Results (R.I.B.A. names first). Singles: J. W. McGregor lost to G. B. Geen; R. Scott halved with D. H. Fish; E. H. Firmin beat J. S. Beard; G. F. Wilson beat O. Chesterton; Alan Scott halved with F. Trumper; P. Hickey beat G. W. Worrell; W. R. Fisher beat J. P. Wheatley; John Grey lost to F. M. Bomer; F. Charity halved with A. W. Turner; W. R. C. Clarke lost to R. W. Preston. Total 5½-4½. Foursomes: McGregor and Scott beat Geen and Fish; Firmin and Wilson beat Beard and Worrell; Alan Scott and Hickey beat Chesterton and Trumper; Fisher and Grey beat Wheatley and Bomer; Charity and Clarke beat Turner and Preston. Total 5-0.

R.I.B.A. beat R.I.C.S. by 10½ matches to 4½.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant, or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. John C. Dixon [A] has been appointed Assistant County Planning Officer with the Cernarvonshire County Council. His address is therefore changed from Stone House, Weaving, Maidstone, to County Planning Department, County Building, Cernarvon, N. Wales.

Mr. J. C. P. West, A.M.T.P.I. [A] has been appointed Chief Architect to the Cwmbran Development Corporation, and will take up his duties on 2 October 1950. He will be pleased to receive trade catalogues etc. at the Town Hall (17 Corn Street Entrance), Newport, Mon.

PRACTICES AND PARTNERSHIPS

Mr. W. Leslie Barrow [A] has commenced practice at 'Sunnymead', Wards Road, Up Hatherley, Cheltenham. He will be pleased to receive trade catalogues etc.

Mr. G. A. Bethell [A] has opened a new office at 19 Leavysgreave, Sheffield, 3 (Sheffield 22863), and will be pleased to receive trade catalogues etc.

Mr. E. John Evans [L] has commenced practice at 66 High Street, Walton-on-Thames, Surrey (Walton-on-Thames 1500), and will be pleased to receive trade catalogues etc.

Messrs. Lawrence Farman and Partners [F/A/A] have now taken into partnership **Mr. Alun A. Thomas [A]**, who has been appointed to take charge of their office at 1 Middle Row, Maidstone, Kent. The main address is 258 Upper Richmond Road, London, S.W.14 (PROspect 1924). The name of the firm remains **Lawrence, Farman and Partners**.

Mr. John B. Guise [A] has taken charge of the Birmingham office of **Mr. C. Howard Crane**. The Birmingham office is at 367 Hagley Road, Birmingham, 17 (Bearwood 1835).

Mr. R. Alan Lambourn [A] having gone overseas as Architect to the Kuwait Oil Co. Ltd., will be pleased to receive technical information and trade catalogues, c/o The Kuwait Oil Co., Ahmadi, Kuwait, Persian Gulf.

Messrs. Lubetkin and Skinner [A], formerly of 115 Mount Street, London, W.1, have taken **Mr. D. C. Bailey, O.B.E. [A]** into partnership, and will in future practise as **Skinner, Bailey and Lubetkin** at 188 Piccadilly, London, W.1 (GROsvenor 6795-6).

Miss Ursula Meyer [A] and **Mr. Gordon Bowyer [A]** announce that the name of their firm is changed to **Gordon and Ursula Bowyer**, and that their office has been removed from 24 Fitzroy Square, London, W.1, to 71 Blandford Street, London, W.1 (WELbeck 4215).

Messrs. Norman and Dawbarn (Mr. Graham Dawbarn, C.B.E., M.A. [F], and Mr. R. F. Lloyd Jones, M.A., M.I.C.E.) have taken into partnership **Mr. Frank Rutter [L]** as from 1 April 1950. The associate members of the firm are **Mr. Alick Low [A]**, **Mr. Herbert Wilson** and **Mr. Raymond Pidgeon [L]**. They practise at 5 Gower Street, London, W.C.1 (MUSEum 7165-6-7).

Mr. C. W. Ransom [A] has commenced private practice at 18 Harwood Avenue, Bromley, Kent (RAVensbourne 2251). He will be pleased to receive trade catalogues etc.

Mr. Vyvyan Salisbury [F] is no longer in association with **Mr. Stanley T. Drew, F.R.I.C.S.**, and will in future practise at the same address, 88 Molesworth Street, Wadebridge, Cornwall, under his own name.

Mr. David Steven [L] has become a partner in the firm of **Messrs. Montagu Evans and Son**, of London and Redhill, Surrey.

Mr. W. J. Twemlow [A] and **Mr. F. H. C. Dixon [A]** have entered into partnership. The practice will be styled **Twemlow and Dixon**, 407 Trevor Buildings, Vereeniging, Transvaal, South Africa, and **Dixon and Twemlow, P.O. Box 980, Windhoek, South West Africa**.

CHANGE OF ADDRESS

The new address for correspondence and trade catalogues of **Mr. William N. Chapple [A]** is 'East Water', The Rise, Llanishen, Cardiff.

The new address of **Mr. D. A. Flett [A]**, Architect, Public Works Dept., Penang, is c/o Public Works Department, P.O. Box 450, Penang, Malaya.

Messrs. Laurence M. Gotch and Partners [F/L/L] have removed to 8 City Road, Finsbury Square, London, E.C.1.

As from 29 September 1950 **Messrs. John Grey and Partner (Mr. John Grey [F] and Mr. F. E. F. Atkinson [L])** will practise from 17 Buckingham Street, Strand, London, W.C.2 (TRAfalgar 3787). They formerly practised at 56 Oakley Street, Chelsea, London, S.W.3.

The new address of **Mr. R. A. Hopkins [L]** is 33 Manor Way, North Harrow, Middlesex.

The new address of **Mr. Alan Niven [L]** is 154 High Street, Kew, Melbourne, Victoria. He will be pleased to receive trade catalogues etc.

Mr. George Whitby [A] has moved his London office to 14 North Audley Street, London, W.1 (MAYfair 0250).

Messrs. Wilson, Hamilton and Wilson (sole partner **Mr. Horace J. D. Hamilton [A]**) have moved from 21 Hope Street, Glasgow, C.2, to 153 Oxford Street, Glasgow, C.5, and will be pleased to receive trade catalogues etc. The office at 9 Calder Street, Motherwell, is being retained.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Associate (40), with modest capital, wishes to purchase architect's practice or partnership. Home counties or provinces. All replies treated in confidence. Box 51, c/o Secretary, R.I.B.A.

Associate, with extensive experience in all branches of profession, including industrial, hospitals, office buildings and schools, seeks partnership or appointment leading thereto. Keen and industrious. Own small practice with possibility of increasing. Preferably in or near Warwickshire. Box 67, c/o Secretary, R.I.B.A.

Fellow, school trained and with Town Planning qualifications, seeks partnership or practice to purchase. Limited capital available. All replies in confidence and any district except London considered. Box 68, c/o Secretary, R.I.B.A.

Old-established practice in two Somerset towns has partnership for sale. Box 66, c/o Secretary, R.I.B.A.

Associate required for practice in Winchester, early partnership considered after probationary period. Box 59, c/o Secretary, R.I.B.A.

Junior partner, Associate, desired by long-established Fellow in S.E. coastal town. Fees average over £6,000 per annum. One-third share offered on valuation agreed by chartered accountants to become equal share on partial retirement of senior partner within five years. Box 62, c/o Secretary, R.I.B.A.

WANTED AND FOR SALE

Wanted. Plan chest, secondhand. Antiquarian size. Box 64, c/o Secretary, R.I.B.A.

Wanted. (1) *English Interiors in Smaller Houses*, 1660-1830, by M. Jourdain. (2) *English Church Architecture*, Vols. 1 and 2, by Francis Bond. (3) *The Chancel of English Churches*, by Francis Bond, 1916 (Humphrey Milford, O.U.P.). (4) *Screens and Galleries*, by Francis Bond, 1908. (5) *Wood Carvings in English Churches*: i. Misericords, 1910, ii. Stalls, etc., 1910, by Francis Bond. (6) *List of Buildings having Mural Decorations*, of dates prior to the latter part of the 16th century, by C. E. Keyser, 1883, 3rd edition, enlarged. Eyrie and Spottiswoode. (7) *Fonts and Font Covers*, 1908, by Francis Bond. Box 63, c/o Secretary, R.I.B.A.

For Sale. Specially made mahogany polished architect's flat top table, size 6 ft. 10 in. by 4 ft. 9 in. by 2 ft. 7 in. high, which consists of 6 antiquarian plan-drawers enclosed with double doors, 4 deep filing or stationery drawers, each 12 in. deep, small centre drawer 3 in. deep, 1 cupboard with sliding doors, the whole in three separate pieces can be seen near Leeds. Good condition and appearance. Also one antiquarian engineer's drawing board and T-square. Box 61, c/o Secretary, R.I.B.A.

For Sale. Antiquarian T-square (celluloid edge), D.E. T-square (ebony edge), D.E. drawing-board (ebony edge, battens, etc.), prismatic compass (ex. W.D.) in leather case with shoulder strap, 66 ft. measuring tape (Chesterman) in leather case with winder (new), reading lamp, metal base with ash tray, flexible support, adjustable anti-glare shade, 4 ft. 40 watt, 230-250 volts; Siemen's electric fluorescent lamp fitting, complete unit with reflectors; high comfortable wooden drawing stool; deal drawing bench (6 ft. by 2 ft. 10½ in. by 3 ft. high), folding legs, two drawers, on to take D.E. drawings flat. Box 60, c/o Secretary, R.I.B.A.

For Sale. (1) 4 ft. dark oak roll-top desk, seven drawers in pedestals and one central drawer; sliding table top and side leaves. (2) 2 ft. 9 in. by 5 ft. high dark stained softwood filing cabinet; 18 divisions and two small cupboards under. (3) Cary 12 in. 4-screw dumpy level in hardwood box and 14 ft. telescopic levelling staff. Will be sold separately. Can be seen at Ealing, London, W.5, by appointment. Write Box 65, c/o Secretary, R.I.B.A., or telephone PERivale 4143.

The A.B.S. FIRE & CONSEQUENTIAL LOSS POLICY

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